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# NUMBERS & ODDITIES #
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-::: N&O #05 :::-

Hi gang, welcome to the fifth edition of N&O. I know I have said this before, but we really need your input. Please, send us your logs, info, schedules and other findings. Thanks!

I intend to do a series of profiles of intelligence organizations in the near future. Can anyone help me to info about the ex-DDR Stasi (Ministerium fuer Staatsicherheit -MfS-), especially their history?

Besides the usual station info and logs, I have the results of the World-wide Jam Session for you and another cipher item from Toby, plus another Memory Lane story written by Simon Mason. But first a couple of short items:

- o Cherry Ripe: the location of Guam as transmitter site was confirmed by a reliable source. The station transmits Mon-Fri only.
- o The Backward Music stations are still active on 5178, 6695 and 6753 kHz. They may skip a couple of days but normally come back again. Hugh copied them in the USA on 6797 kHz. I copied a -for me- new format on 4802 kHz on 14 August, this one transmitted something that sounded as a series of whistles.
- o Schedules: if you follow a specific station, please send us the skeds. It is especially very useful for new N&O listeners when they know where to look for a specific station. Stations tend to use the same freqs after a while, so skeds can also be helpful to find a station after a frequency change.

* The 'Ticking station' a.k.a. 'Dashless Morse station' revisited *

Remember the ticking/clicking station that occupied 4042.4 kHz for a while during the past two months? (see N&O May 1998).

The clicks had no 'normal' pattern and it sounded like someone was

practising morse by ticking with chopsticks on the table. No words were transmitted, just ticks/clicks. The station returned early August briefly on 5002 with its typical 'pock-pock-pock' sound.

Between 25 July and 3 August, I heard a morse station on this frequency transmitting the same irregular patterns but now in clear sounding morse. The signal was very good. On 2 August at ca 00.30, I copied another cw station. It transmitted the same weird irregular dots. I tried to find a pattern in the dots but couldn't find any. Again no letters or figures, just dots. There is definitely a short pause between groups of dots. I wonder if the groups represent digits. I pretended that they represent digits and jotted the numbers down. The following is the result of 18 minutes listening. Most groups consist of 1 to 4 digits. Longer groups have been copied by other listeners.

Note the huge amount of 5-dots groups. The first row states the number of characters in one group and the second row the digits formed by the number of dots, e.g. 5 dots equals the digit '5'.

group	digit	group	digit	group	digit
1	5	1	10	1	3
2	5 5	1	5	2	2 7
2	7 2	2	4 1	2	1 8
1	5	3	3 1 4	1	8
1	5	1	5	1	1
4	1 3 1 3	1	6	1	5
2	2 2	1	5	1	1
2	2 2	2	4 1	1	1
1	4	1	5	1	5
2	1 3	1	5	2	5 5
1	5	1	5	1	5
1	5	1	4	1	5
2	2 2	1	9	1	5
2	4 1	1	5	2	1 3
4	3 1 2 2	1	5	2	3 1
2	2 2	2	4 1	1	5
1	5	2	4 1	2	1 3
1	5	1	5	1	4
1	5	1	5	2	5 5
3	2 2 4	1	5	4	5 10 9 1
3	5 5 5	2	1 3	3	5 1 9
1	9	1	5	1	5

In the evening of 13 August, the station transmitted lengthy 'messages' for hours. Here is one example:

Groups: 21

Digits: 7 5 3 4 25 23 2 10 1 14 3 77 7 42 51 17 22 17 41 2 5

Another change took place on the 14th when each group suddenly ended with a dash. This way it sounds just like a stripped Link-11 signal. Many- groups were transmitted.

Weird! Clues anyone?

★ MORSE STATIONS by Guy Denman ★

I have been trying out some of the morse practise programs, that Ary mentioned last month. The one that was mentioned Numorse 4 is very good, but I have found an even better one, MRX, the file is mrx_win.exe and can be obtained from <<http://www.ozemail.com.au/~jwsamin>>. The advantage of MRX is that you can practise receive with figures only, which is the main requirement for numbers stations. Numorse does not have that facility which I think is a drawback.

(You must have overlooked this option, Guy. You can use your own ASCII files -e.g. dumps from numbers stations- and play them in NuMorse. To achieve this, you have to go to 'FILE' and open the file. Now click on 'PLAY', then click on 'continuous' and 'serial' and click on 'play' to start. NuMorse will now play your file. Or, if you don't wanna use files you can force NuMorse to generate only numbers by clicking on Settings/Filters/Numbers. -Ary-)

If any of you have tried any of the training programs, or know of any others that are good, I would be very pleased to have your comments. I still seem to have very little interest in this column, I thought that the large number of morse logs in the last newsletter might persuaded some of you to have a go at learning morse.

I have been wondering how those of you in the USA get on with copying the morse stations. I have one listener who listens every weekend, but so far he has not been able to copy anything.

Are there any others of you are able to copy any of those stations. I realise it must be very frustrating to know that there are a lot of stations on that are not audible in the USA. The same applies to us in Europe, when the FAPSI RTTY stations are mentioned, I have yet to hear one of them. Hopefully with the increased sunspot cycle, possibly conditions might improve and let you hear some of them. I have seen a log recently on WUN from Canada, reporting an M12, so some of them can be hear over there. I have also tested out that Web radio that was mentioned on Spooks. There seems to be one major problem with it as it allows 5 persons to use 1 receiver at the same time, which to me seems very confusing. I did also try it when I was the only one using it, I tried to tune it to some very strong signals that I was listening to on my own receiver, but I was unable to hear any of them.

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To continue with the profile of a few more stations.....

M23::: Mode ICW. Another strange station always changing times and frequencies. Can use 2, 3 or 5 figure identical IDs. Or strings of dots, Vs or Is, and no figures.

ID variants, 2 figure even/odd, 3 figure even/odd, 3 zeros, 5 zeros, 5 fives, 5 ones, etc, Vs with gap every half minute, Is with gap every half minute, Continuous Vs, continuous Is. In some cases of 3 figure IDs if all figures are odd there is no message, if even, there will be a message sent. They do have one regular transmission, that has been going now for 19 months. It is on daily at 0800 and 1400. 2 frequencies used at same time 8307 and 9285. It just sends the ID 579 for 10 minutes. When they do send a message they use long zeros and the format is

Call Preamble Message Repeat Ending
00000 R3 to 20 = 33 33 = 33x5f = IMI IMI = 33 33 = =
First and last groups are normally the same. Not all groups are random.

One frequency that has seen regular use is 6999 at 1100. Another in use at present, April 1998 is 7795 at 1500. Usually sends long messages. Is still on this frequency in July repeating the same messages from April. Has now in August started sending a new message. Many variants on this theme, some EG all 3 fig groups are 2 parallel frequencies, others not.

Frequencies used to date:

3380	4767	4825	4893	5019	5180	5349	5540	6525	5550
5665	6290	6520	6560	6870	6918	6928	6999	7647	7520
7850	7795	8307	9285	10775	11346				

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M24::: Modes ICW, MCW, MCW CC. The same format as M14 except that the 5 zeros at the end are sent spaced out, and the whole transmission is sent at high speed. Usually 40 WPM.

Sometimes sends very long messages. Longest so far is 431 groups which took 45 minutes to send. Has been noted to be back on same frequencies and times as in 1997. Not very easy to find as it changes frequency often, and can be on at any time in the hour.

Any reports of this station appreciated.

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M26::: '98'

The station transmits irregularly with a speed of 10 WPM, and can easily be recognized because of its typical messages. The messages mostly start with '98' but other numbers were also copied, most of them in the 90's.

Format: 98 + several 5FG, continually. The first groups in the various messages often start with the same figure(s), e.g.

98 12744 13111 11111
98 07802 13111 11111
98 04742 11111 11111

The final group is almost always 11111, but other groups of the same figures have been noted (55555 and 22222).

Sometimes the station sends '98 98 98' for hours.

Speed: 10 WPM.

Freqs: 2379 3153 3146 3159 4439 4442 4445 5171 5196 kHz
often on two parallel frequencies.

Note: the station hasn't been logged for well over a year.

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M29::: Mode ICW. VDE Has three formats, the first M29a, is in regular use each day. Another is not heard as often but when it is can send several messages over a period of time, changing frequency each time. The first format transmits on the same frequency for 1 month and transmits the same message for one week. The messages are usually 10 to 14 groups. Although the message is changed each week quite a lot of the same groups appear in many messages. Although the call is VVVx2 the rhythm of sending is unmistakable. Speed 12 WPM.

It favours frequencies in the lower part of the band from 3 to 6 Mhz. This time of the year at the lower end. Was on 3200 in December, and at present in January is on 3270. Will change on 1 February. 1 March on at 2000 on 5460 1 April on at 1700 on 6590, 1900 on 5709, 1 August on at 1700 on 6749, 1900 on 6569.

Call	Preamble	Message	Ending
VVVx2 de VDEx3 R5	VVVx2 de VDEx3	= = 14x5F	AR

Very strange messages, groups often repeat from week to week, and also may appear 5 times in the same message.

Second format, M29 Call as above followed by
18 18 58 58 8 8 1930 1930= 58x5F AR

Third format M29B Call as above
28 28 25 25 11 11 04 04 0800 0800 25x5F

25 is G Count 11 and 04. Extra figures 0800 Time of first transmission
UTC+1. No = = signs. Repeats 30 minutes later 100 kHz HF.

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M34::: 11 12345 2 Fig IDs. No ending.
Logged recently on 2 March at 0820 on 5040.

Format: Call 11 27 R5
11 11 11 13x5f single group message
11 11 11. Same message repeated

27 27 27 13x5f single group message
27 27 27. Same message repeated. No ending

Machine sent at 15 WPM, using long zeros. Note that the second and last
group in the message are the same.

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Round up of Morse happenings.

I have not put a lot of frequencies in the morse happenings, as you can
find them in the logs column. If any of you need the logs in Date and
Time order, please contact me.

M1 will make its usual change of ID and frequencies on 1 September. ID
will be 463 and frequencies are:

Sunday	0700 on 6508
Tuesday and Thursday	1800 on 5474, 2000 on 5017
Saturday	1500 on 6261

The end of the Month transmissions in July were not as usual, there
were none in June, and the last Saturday in July was a normal trans-
mission. Then on Tuesday 28 July were sent 2 end of month transmissions,
they have never been logged on a Tuesday before. Then on Thursday 30
July there was a short end of month at 1800 and nothing at 2000.

M1B. Still remaining the same skeds as last month. In the past they have
tended to change frequency quite often but at the moment seem to be
stable. Will probably change in the Autumn or Fall.

M3. Still very active from 0630, which is the earliest I have heard it, any reports of earlier skeds appreciated. Still doing the same thing, repeating transmissions exactly as in 1997, even sending the same message. The special ID has appeared again. This ID comes up from time to time. On at all different times but the same frequency 5365. heard at 1800 on Wednesday 29 July, sending a message of 40 groups. This same message was repeated at 0630 on Friday 7 August. Messages to 121 seem to be around 40 groups where the normal M3 is 50 to 59.

M4. Still only on the Second week of the Month as per last months skeds. ID for August 99516. Sends the same message for the complete week.

M7. I have not heard any this month, not to say that there are not any on, they do not stick to any regular times so it is just a matter of luck if you find them. They are still around as I caught the end of one on 10 August on 7475 at 1020.

M10. Some present skeds

Sunday	1645 on 5028, 1810 on 8191, 1920 on 10921
Monday	1500 on 6946, 1645 on 5028, 1920 on 10921, 2100 on 5028
Tuesday	1500 on 6947
Wednesday	1645 on 5028, 2100 on 5028
Thursday	1100 on 11416, 1810 on 8191
Friday	1710 on 9454
Saturday	0710 on 8191, 1645 on 5028

Remember that you will find most of these are using a second parallel frequency. If you hear any other skeds I always appreciate reports of them.

M12. Still as busy as ever, see the logs column for a list of frequencies. They are still coming back on the same frequencies as they used last year. Using the same IDs. A recent one of these is on Sundays at 0710 on 6783 to ID 631 with a null message.

One regular sked that I have not heard since Sunday 26 July is the Sunday sked at 1840 1900 and 1920 that used to send the same message, 792 66 792 66, has anyone heard it anywhere else ?

M13. Still as unpredictable as ever. Is coming back on frequencies used a year ago, but not always. Another thing it is doing is changing IDs. You can tell this from the serial number of the messages, and the fact that the sked remains the same. The one on Friday 14 August at 1700 ID 629 was previously 228 and before that 915

M14. Still carrying on sending the strange double messages, although the DK is different, the second message is always 1 group more.

M23. Found on a new frequency recently 13450. Active on Friday 14 August at 0900 to ID 195 and 0930 to 513, you will note that as these are odd numbers there were no messages sent. Missing on 7795 for 1 week but back on there again.

M29. This Months frequencies 1700/6749 and 1900/6569. Will change again on 1st September. Still sending a new message each week of between 11 and 15 groups.

M51. Still churning out its endless 100 group messages. It seems to favour frequencies used by other numbers stations.

M53. Not on every night, but is easy to find as it uses the same time and frequency 2000/8231. Another station I would like any reports of as it is hardly ever a very good signal in the UK and I wonder where it might be located.

That is all for this month, any logs of morse stations are always appreciated.

73, Guy

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Thanks Guy, great stuff as usual. I'd like to end the morse section with a profile of mystery station P7X. Thanks to those who sent us the logs. Comments are most welcome.

o General

P7X is a mystery CW station that is logged frequently by -mostly- N.American dxers. Who, what, where is still a mystery. It seems to be some kind of training station. Stations with the same message format but different IDs have also been heard occasionally:

Frequency	Id
-----	---
4235	F3B
6456	H0E
6507	J3E
6527	F3B
6911	E3N
7549	E4I
9550	D6T (CW QRA marker repeated, no groups)
29996	N8S (CW "QRA N8S II 00 II" repeated twice then off)

On one occasion, P7X and F3B were heard simultaneously, with a total of 4 transmitters audible.

The F3B station and others mentioned haven't been heard in years and

are presumably gone.

o Frequencies

3343	3344.5	4416.5	4439.5	4444.5	4829
4859.5	4869.5	5127.5	5211	5212	5215
5302	5397	5398	5423	5431.5	5779.5
5819.5	5879.5	8039.5	8048	8056	8057
8059	8158	8168	9619	9665	10692
10798	11403				

o Format

There are two bursts of FSK prior to the CW transmission; this used to be like clockwork, but has become less so in recent months, and is sometimes omitted. They used to run about 15 wpm CW, now runs 10. Operation is more irregular now than in the past few years.

Transmission times are normally at h+00, h+15, h+30 and h+45, then into typical CW "QRA DE P7X II PII 151300Z 120 GR BT" and then 120x 5LG's. There are always exactly 120 groups.

o Example

Two databursts (not always)
QRA DE P7X IIP II 101400Z GR120 BT
followed by 120 5LG's
BT AR
T T

The "T" is a long dash which occurs when P7X switches between CW and data modes, and isn't part of the message content.

The date/time group after II P II changes each cycle of course.

o Modes

CW
Sometimes high speed 850Hz FSK. The data transmission mode is one which is sometimes used by the US military.

★ TWO LETTER STATIONS ★

by Simon Mason

In his book 'Secret Signals', Simon wrote about the then very active stations PN, DFD21, DCF37 and the other 'two letter stations'. PN, DFD21 and DCF37 no longer exist, but there are a couple of 'two letter stations' still active. These stations and frequencies are mentioned at the end of these station profiles.

Note: I have omitted the original frequency lists. -Ary-

★ PAPA NOVEMBER ★

Here is a case of "where to begin?" There are over 80 callsigns on nearly 40 different frequencies, all of which indicates a very big set-up. I can recall hearing these transmissions in the early 1970's and they certainly date back further than that. I remember tuning into a station in 1971 and being almost hypnotised by the strange interval signal (it is a different one now). It consisted of a female voice repeating "Papa November" over and over continuously with a sort of snake charmer's flute playing in the background. This went on for five minutes, after which a woman would start sending messages in five figure groups.

When I started to actively listen to number stations this was one of the first I studied. It is unique in that it broadcasts on four frequencies at the same time, but not simultaneously. By this I mean that there is a time lag between the four frequencies. It is as though four different machines are started, one after the other. Until 1989 real female voices were used, that is, a woman would be giving a list of German five figure numbers and she would sit down and read the whole thing out into a tape recorder. The tape could then be transmitted at the appropriate time. At the time of eventual conversion to a voice synthesiser machine, four different women were being employed in the mind-numbing career of number reading. More about them later.

The frequencies used are 2707, 5015, 7404 and 11108. The choice of freqs is interesting as it insures that at least one will be propagated at any given time. As it happens, the schedule is designed to give a wide geographic coverage. The station transmits every day, even on Christmas, at 0000, 0030, 0600, 0630, 1200, 1230, 1800 and 1830. The transmissions on the hour are in the AM mode, whereas the broadcasts on the half hour are all in upper sideband.

These data suggest that maybe a world-wide operation is in force. After all, a station that transmits on four frequencies every six hours using both AM and USB is trying to get its messages through at any cost. On the whole this operation is very professional. The broadcasts begin precisely on the hour or half hour and very few mistakes are made. It is not totally perfect however. Here are two errors that have been noted:

- (1) when the stations were being converted to auto-voice on a few occasions both live voice and auto-voice messages were being sent out on the same transmission. It was as though no one had told the female readers that they were being replaced by machines. They carried on, broadcasting on top of the auto-voice, thus making the whole transmission unintelligible.
- (2) On another occasion a sister station (DFD37 which is part of the same set-up) was being sent out over Papa November frequencies instead of

its normal channel of 3370. This was final proof, if any was needed, that they are all part of the same organisation. As will be shown later there could be some doubt about this. After all, DFC37 is, on the face of it, a legitimate callsign of the Federal German Republic (formerly West Germany). Indeed, certain publications have this and its twin, DFD21, in their listings as legitimate stations.

Anyway, back to Papa November: as shown, the station is pivotal to whatever agency operates it and the format it uses reflects this.

This is unique amongst number stations. A 3 figure identifier is used, followed by a group count. The difference is in the daily workings of the station. Papa November has allocated to it a series of 3 figure identifiers which are specific to the station and are not used by any of the other stations in the network. After the callsign is sent a woman sends out the list of identifiers/group count, like this:

PN 1800 25 JUL91: 824 4 695 13 771 11 372 12 525 10 717 8

824, for example, is the identifier and 4 is the number of groups. This is said as "824 824 4 gruppen, 695 695 13 gruppen", etc. After the last heading the message for 824 would be sent which, in this case, is four groups of five figures, e.g. "12334, 12334, 89856, 89856, 29964, 29964, 13277, 13277 ende. Achtung! 695 695 13 gruppen" and so on.

Now, this represents one transmission (at 1800 on 25 July, 1991). The next day a new message may have appeared. It will take the first place on the rota of messages, like this:

(new message) 543 12 824 4 695 13 771 11 372 12 524 10

Note also that the last message on the previous day's rota has dropped off the bottom. If we look at the rota for several days the picture becomes clearer:

SUN	MON	TUE	WED	THU	FRI	SAT	SUN
997 11	717 12	233 17	622 10	117 11	697 9	335 12	477 12
524 8	977 11	717 12	233 17	622 10	117 11	697 9	335 12
543 11	524 8	997 11	717 12	233 17	622 10	117 11	697 9
771 22	543 11	524 8	997 11	717 12	233 17	622 10	117 11
825 7	771 22	543 11	524 8	997 11	717 12	233 17	622 10
372 16	825 7	771 22	543 11	524 8	997 11	717 12	233 17
543 11	543 11	543 11	543 11				

New messages appear daily and the old ones are discarded. This is not always the case, however. Notice the message 543 11. It is stuck on the bottom of the rota for a few days, perhaps for as long as three weeks. Also, message 233 17 joins it at the end. This sort of thing is a regular

occurrence. Presumably the message is retained on the rota until the agent contacts the senders to say that the message has been copied. Then the heading will finally disappear from the rota. Certain identifiers have a tendency to stay around for a long time. For example, 543 messages can stay on a rota for several weeks. Maybe agent 543 or whomever cannot acknowledge easily so the message has to be repeated over a period of time.

Traffic analysis is easy with this station as the number of messages changes considerably. Sometimes there may be only five messages, at other times perhaps ten. Here is a selection of headings and group counts sent over the last few years. Perhaps the changes in traffic relate to events in the real world.

Note: The three figure number is the addressee, the one or two figures after the addressee is the group count.

21 MAR 90	16 APR 90	16 MAY 90	21 JUN 90	19 AUG 90	2 DEC 90
683 6	706 8	853 6	351 7	269 10	352 15
462 11	321 15	307 35	974 9	564 8	563 14
383 7	178 2	923 10	156 12	133 6	868 12
318 12	084 6	321 9	064 18	620 9	935 11
096 8	464 11	243 12	541 13	713 7	736 7
484 11	997 8	582 7	572 13		
948 5	563 4	494 8			
825 23	688 16				
307 19	825 10				

Note how the traffic varies. Also, some of the messages consist solely of two-five figure groups. For 20 APR 91 the traffic for addressee 484 was only 48285 and 36187. It is difficult to imagine what the purpose of such a brief message might be.

Addressees: Here are all of the addresses used by Papa November. The number of different addressees will give some idea of the scale of this station compared to other stations in the same organisation.

007	018	040	046	052	057	064	078	084	092	096		
109	112	126	133	144	156	160	174	178	179	181	197	
212	217	219	220	231	233	238	243	269	275	280	293	
307	312	318	321	337	348	351	352	367	372	376	383	399
406	422	438	448	462	464	468	479	484	487	491	494	
525	535	541	543	544	552	563	564	569	572	581	585	587 595
602	616	620	637	657	669	678	683	687	688	690	695	
706	713	717	725	736	749	765	771	799				
805	809	825	843	849	853	868	877	881	887	891		
905	916	923	927	935	948	965	966	974	994	997		

Of course Papa November is not listed in any available frequency list and its callsign is not issued by any telecommunications authority. However, there are two numbers stations, indeed, the only ones, that have, on the face of it, legitimate callsigns and these are discussed next.

★ DFC37 and DFD21 ★

These stations are on two frequencies; 3370 for DFC37 and 4010 for DFD21. They are, to all intents and purposes, the same station. However, as will be shown, the history of these stations goes back to at least the early 1970's, as does that of Papa November. The interval signal in those days was a complete musical scale of ten descending notes, after which a woman said "Hier ist DFC37" or "Hier ist DFD21". When they were converted to auto-voice in 1988 the interval signal was changed to electronic tones followed by a woman with "Delta Foxtrot Charlie Drie Sieben" or "Delta Foxtrot Delta Svo Eins".

Schedule: DFC37: 3370 - 1500-1800
DFD21: 4010 - 1500-2200

Messages begin on the hour in the AM mode and are repeated on the half hour in single sideband.

The stations have their own addressees unique to them and not used by Papa November or the other two letter stations. Here is a typical day's broadcast:

DFC37	DFD21
1500 - 036 236 450 A	1500 - 698 154 C
1600 - 387 400 832 B	1600 - 413 356 D
1700 - 698 154 C	1700 - 036 236 450 A
1800 - 413 356 D	1800 - 387 400 632 B
1900 - 036 236 450 A	1900 - 698 154 C
2000 - 387 400 832 B	2000 - 413 356 D
2100 - 698 154 C	2100 - 036 450 236 A
2200 - 413 356 D	2200 - 387 400 832 B

As noted, broadcasts are repeated in upper sideband on the half hour. I have added the letters A, B, C and D to indicate identical messages, that is, message "A" on DFC37 at 1500 is the same as on DFD21 at 2100, etc. You can see that they really are the same station and that, on any particular day, there are four opportunities in the AM mode and four in USB for addressees to receive their traffic.

As with Papa November, DFC37 and DFD21 have unique three figure identifiers. These are:

002	012	020	036	044	047	062	065	069	074	079	083	085	094	095
107	114	116	117	121	129	130	134	147	154	157				
204	211	225	229	236	237	251	259	261	273	278	291	295		
316	323	330	336	354	356	387	397							
400	411	413	414	423	426	428	431	435	450	471	483	490		
619	623	641	644	651	680									
735	784	792												
811	817	821	823	827	832	840	846	851	852	867	872	880	890	
904	914	925	934	991										

Because DFC37 and DFD21 have seemingly legal callsigns you would expect them to appear in such utility station lists as the Guide to Utility Stations by Klingenfuss and the Confidential Frequency List compiled by Geoffrey Halligay. And, indeed, they do! You might think that this is a breakthrough - two numbers stations listed in these publications, with the operator's identity exposed and transmitter locations listed. Unfortunately, the inclusion of these stations does nothing to explain the mysteries. Indeed, the opposite is true. Their inclusion only adds to the intrigue. Take the Klingenfuss Guide first. According to this book DFC37 and DFD21 are operated by the Deutsche Bundespost (the German Post Office). Fair enough. Far-fetched though the idea may be, let's suppose that a company as technically advanced as the DP has a use for a station sending numbers; the telecommunications equivalent of talking drums or smoke signals. We already know that Papa November and the other two letter stations are part of the same organisation as DFC37 and DFD21. Here is the proof:

- 1) The same four female operators were used (until the conversion to voice synthesisers) on DFC37, DFD21, Papa November, etc.
- 2) The stations do not duplicate three figure identifiers, as would be the case if they were from separate organisations.
- 3) Mixing errors have caused DFD37 to be transmitted on Papa November's frequency.

Now, of course, although DFC37 and DFD21 are proper callsigns, allocated to Germany, Papa November, Papa Zulu, Charlie November and all the rest are not. An organisation such as Deutsche Bundespost would not, I think, operate these illegal callsigns. The Confidential Frequency List states that DFC37 and DFD21 are part of an "internal net" and places the transmitter site at Frankfurt, Germany. Intrigued by this, I wrote to the Deutsche Bundespost but received no reply. I next wrote to Herr Klingenfuss and asked why he listed DFC37 and DFD21 but did not list PN, etc. His reply didn't really answer the question:

'Sorry but we do not monitor these 'number stations' for several

reasons, e.g.

- Since several decades nobody has ever succeeded in the exact location and purpose of these stations.
- Nobody has ever been able to contact such a station or to get a verification for reception, etc.
- All what especially those SWLs from America, etc. write and state about these stations are presumptions, guesses and nonsense. From our point of view, monitoring these stations is a waste of time and you get more from reading Bracknell Meteo's Teleprinter coded weather during 24 hours than from monitoring these number stations' for 24 seconds. Consequently, we cannot answer your questions because Klingenfuss Publications considers to give facts and not guesses."

But is it therefore a fact that DFC37 and DFD21 are operated by the Deutsche Bundespost? Almost certainly not. It would be interesting to know were, exactly, these callsigns are registered, if, indeed, they are. As mentioned earlier, before automation four distinct female operators were employed in reading out the numbers. They had their own characteristics and delivery styles. One even sounded as though she had a Welsh accent. It became possible to know when certain women were on vacation or perhaps ill. One could often hear them pausing to swallow or take a deep breath, but to their credit I never heard them cough. They were mystery ladies and I tried to imagine them outside the work environment -would anyone else have the slightest idea what they did for a living? What would they say if anyone asked? In one way their voices live on. The voice synthesiser now in use is modelled on one of the real voices. This woman's voice must have been "sampled" before technology made she and her colleagues unnecessary. Imagine being able to switch on a radio and hear your own synthesised, disembodied voice coming out of the speaker!

* TWO-LETTER GERMAN *

As we have seen, Papa November uses four frequencies and DFC37/DFD21 use one each. The other members of this set-up use many frequencies in the 2.0 to 30 MHz range. There are many different callsigns, each of which has its own three figure id, although nowhere near as many as PN. The format is similar to Papa November. The woman repeats two letters from the international phonetic alphabet four times, after which random electronic tones are played for a few seconds. This goes on for five minutes after which the woman gives the three figure identifier and then the group count.

Example: "Yankee Sierra" 4x, electronic tones (5 min repeated), "635 635 27 gruppen. 516 516 78 gruppen. Achtung, 635 63527 gruppen." Into five figure text.

There are at least 40 different frequencies used by these stations.
Here is a complete list of all the stations noted on these frequencies,
along with the three figure identifiers they use:

AB - 804, 299, 531	AL - 043, 969, 023
AM - 119, 791	AO - 142, 113
AU - 600, 349, 244, 385, 006, 554, 691	BE - 558, 903
BI - 191, 721	BJ - 358, 591, 152, 879
BU - 608, 073, 492	CD - 059
CI** 444, 555, 666	CN - 158, 430
CT - 884*, 465, 223, 286, 032	DB - 038, 329, 848
DF - 281, 718	DO - 167 (English)
DT - 809, 015, 503	EG - 472, 795, 267
EL - 928, 510, 063	ER - 573, 885
FB - 009, 382, 653, 361	FP - 081
FS - 099, 361, 816	GC - 082, 808, 334
GZ - 628, 803, 285	HK - 393, 621
HS - 639	IT - 139, 525
JB - 606, 995, 239	JD - 534, 802
JO - unknown	JU - 271, 667, 499
JW - 521, 081, 123	KR - 737, 171
KW - 884, 091, 908	LA - 873, 355, 363
LD - 482, 677, 146	LE - 633, 910, 262
LG - 224, 484, 761	LU - 998, 031, 456
MH - 013, 255, 604	MN - 628
NU - 264, 599, 368	NZ - 202, 649, 955
OK - 319, 617, 812	PB - 917, 263, 709
PG - 217, 424, 732	PJ - unknown
PL - 855, 131, 679	PT - 118, 551
PZ - 143, 625, 374	QL - 410, 028
RK - 104, 702 (English)	RO - 941, 098, 660
SB - 527, 962	ST - 481, 755
TE - 460, 103	TP - 004, 975, 738, 696
UF - 234, 655, 049	UG - unknown
UI - 443, 778	UL - 137, 781, 218
VB - 088, 415, 697	VO - 141, 283, 507
WL - 115, 522, 026	WP - 989, 716
XL - 381, 427, 610	YB - 042, 979, 676
YS - 635, 516, 027, 907	ZB - 589, 926, 203
ZG - 763, 405	ZO - 209, 391, 475, 681
ZP - 505, 125, 703	ZT - 250, 863

* All traffic for this identifier starts with either a 1 or a 0, e.g. 01222, 19988. This applies to 884 only, the others use random five figures.

** CI seems to have been a test broadcast. Its distinctive identifiers point to this and it was heard only once, during the changeover to

voice machine.

There are, strangely enough, one or two English language versions of these stations. Those noted so far are "Romeo Kilo", "Juliet Oscar" and "Delta Oscar". The woman announcer on these says "Message for 167, 167 88 groups. Attention!", and then goes into the five figure message. The English variant, apart from being very seldom heard (at least in Europe), is unusually faint and distant-sounding, as though the transmitter site is not on the European continent. The woman's voice has an oriental accent, not German at all. This may suggest that the activities of the organisation behind this station have a world-wide involvement. My own theory is this: DFC37 and DFD21 are aimed at personnel in Western Europe. The times of the broadcasts (afternoons and evenings in Europe), the frequencies used (3370 and 4010) and the large number of addresses seem to back this up. These signals are not readily heard outside of Europe so this would seem to be the case. The traffic is fairly substantial; each addressee has between 20 and 50 five figure groups in each message.

Papa November would seem to be a general alert broadcast. The low five figure group counts (2 to 20) mean little information can be sent to the agent. The message would seem to be on the nature of "Pick up a message at (place)" or "Tune into a broadcast at..." The real info would be sent by all the other two letter stations world-wide as their group counts are always about 100 groups in total.

The suggestion of a world-wide operation is backed up by the frequencies used. 19295 at 1400 is not a combination meant to be heard in Europe. Also, certain stations never appear below about 10 MHz, while others keep below 10 MHz. This would suggest that "Bravo Uniform", for example, which never appears below 10 MHz is meant for agents outside Europe. Similarly, "Yankee Sierra", which never broadcasts above 8 MHz, is meant for agents closer to Europe.

The 2 letter stations have been heard at every hour and half hour during the 24 hours in a day. The vast majority broadcast between 1800-2000, suggesting that the recipients of the messages are located mainly in Europe.

★ STILL ACTIVE IN 1998 ★

The next six stations have been heard on the following times/freqs:

::: English stations (E16)

EH	1530 UTC, 19295	Wed, Fri, Sat
	1600 UTC, 19295	20240 20350 Wed, Fri, Sat

BL	0800 UTC, 12092	12210 12314 13890
----	-----------------	-------------------

2000 UTC, 11108 11545 11617

AU ???? UTC, 4821//4888

MD 0800 UTC, 12210 19292
0900 UTC, 12092 12314 13775 13890 16414
1330 UTC, 11545 12092 16220
1400 UTC, 11545 13775 16414

::: German stations (G16)

GK Sunday 1930 UTC, Jan 3262, Feb 4888, March 5732, April 7404,
May 7404, June 8063, July 9325, Aug 7404, Sept 6853, Oct 5770,
Nov 4888, Dec 3228

Also noted on weekdays at 1930, 2000, 2030, 2100, 2130, 2200,
2230 on 3262, 4543, 4594, 4821, 4888, 5015, 5182, 5284, 5732,
5770, 6853, 7404, 7858, 8063, 8173, 9040, 9325, and 10177

WL 1000 UTC, 12092 13890 19755 20240
1900 UTC, 10177 14622
1930 UTC, 7404 13890

* CHERRY RIPE (E4) *

Following last month's profile and schedules, Darren and John noted a
change in the station's format and its schedules. Thanks guys!

::: Here are the freqs as noted so far, please inform the group if you
find a new frequency.

UTC frequencies

1000 20474//23461
1100 20474//23461
1200 20474//23461
1300 19884//22108
2200 15624
2300 17499
0000 17499//22108
0100 21866

John reports: ''Since at least 0000 UTC on 4 August, Cherry Ripe seems
to be following a new format. I've heard four broadcasts now that are
following this new pattern...''

::: Format:

H+00 Cherry Ripe tune played ten times
 H+01 message number repeated FOUR times (not the usual ten)
 H+02 Cherry Ripe tune x10
 H+03 message number x4
 H+04 Cherry Ripe tune x10
 H+05 message number x4
 H+06 Cherry Ripe tune x10
 H+07 message number x4, six chimes, and into 5FGx2

::: Sources:

Darren Riley <daz@globalnet.co.uk>
 John Maky <110425.2513@compuserve.com>

★ COUNTING STATION SCHEDULES ★

 Counting Stations (TCS) (E5 & V5) List #11 of 15 Aug, 1998
 Columns with ? indicate not reported for some time and may be inactive.

Courtesy Bob Roehrig <broehrig@admin.aurora.edu>

ZULU	KHZ	M	T	W	T	F	S	S	LANG	NOTES
=====	=====	=	=	=	=	=	=	=	=====	=====
0000	4640.0	X	X	X	X	X	X		EE	//5046
0000	5046.0	X	X	X	X	X	X		EE	//4640
0100	15478.0			X		X			SS	//16050
0100	16050.0			X		X			SS	//15478
0200	12300.5		X				X		SS	//14421
0200	14421.0		X				X		SS	//12300.5
0300	12300.5		X				X		SS	//14421
0300	14421.0		X				X		SS	//12300.5
1100	13555.0						?		EE	//14406
1100	14406.0						?		EE	//13555
1100	16068.0		?		?				EE	//10863 ?
1200	10223.0			X			X		EE	//13518
1200	13518.0			X			X		EE	//10223
1200	13906.0			X			X		EE	
1300	7547.0		X			X	X		EE	//10529
1300	10529.0		X		X	X	X		EE	//7547
1500	4470.0					?			EE	//5046
1500	4670.0					?			EE	//5046
1500	5046.0					?			EE	//4470
1500	5046.0					?			EE	//4670
1500	7600.0		X			X			EE	//10597
1500	8014.0			?				?	EE	//9274
1500	9274.0			?				?	EE	//8014
1500	10247.0			?			?		EE	
1500	10597.0		X			X			EE	//7600

1500	12197.0		?		?	EE	
1700	6840.0				?	EE	
1700	6891.0		?			EE	//8085 ?
1700	7430.0				?	EE	
1700	8085.0	?		?		EE	//6891 ?
1800	11072.0				X	EE	
1900	4640.0	?	?			EE	//5046
1900	5046.0	?	?			EE	//4640
1900	13451.0				?	EE	
2000	4470.0	?		?		EE	//5046
2000	5046.0	?		?		EE	//4470
2000	6780.0			?		EE	
2000	6891.0					?	EE
2100	9090.0		?			?	EE

Known TCS frequencies:

3186	4040	4307	4470	4576	4640	4645	4670	5046	5249
5330	5407	5413	5692	5790	5812	5919	6770	6780	6784
6802	6840	6891	6955	6963	6967	6969	6976	6999	7410
7430	7473	7525.5	7547	7585	7600	7645	7709	7740	7875
8014	8078	8085	8143	8285	8418	9030	9049	9070	9074
9090	9219	9274	9785	9844	9929	9958	10191	10223	10247
10262	10324	10424	10508	10526	10529	10570	10597	10665	10723
10727	11072	11190	11415	11470	11491	11526	11532	11564	12023
12150	12156	12175	12197	12221	12300	12714	13444	13450	13555
13808	13874	13906	14358	14364	14390	14406	14421	14448	14703
14811	15450	15478	15651	15938	16050	18240			

* CRYPTO - SIMPLE SUBSTITUTION *

by Torbjorn Andersson

Table of contents

- * Introduction
- * The Caesar cipher
- * The Checkerboard
- * Simple Substitution using an Unordered Alphabet

* Introduction

The most simple crypto systems only substitutes the cleartext letters for other letters, numbers, or, in some cases, arbitrary symbols. Usually only one cryptosymbol is allotted to each individual cleartextsymbol, but in some more complex systems, variant cryptosymbols are allotted to the more common letters of the language in question.

* The Caesar cipher

Julius Caesar is said to have used a very simple method to safeguard his

communications, the so called Caesar cipher. In the Caesar cipher the letters of the cleartext are substituted for the letters found three places further down the alphabet (at the end of the alphabet, the letters "wrap around", so after Z, the letter A follows), and the key for Caesar's secret cipher looks like this:

Clear text: abcdefghijklmnopqrstuvwxyz
Cipher text: DEFGHIJKLMNOPQRSTUVWXYZABC

Example: Julius Ceasar
Becomes: MXOLXV FHDVDU

* The Checkerboard

The Greek historian Polybios (ca 200 BC) tells us about a signalling systems, that should have been in use in Greece. The Greek alphabet of 24 letters are written in five rows of five letters each (the last row only having four letters), thus forming a square, or checkerboard. Then, according to Polybios, to send a message to a place within sight, torches are held up. First between one and five torches are used to indicate the row where the sought letter stands in the square, then the number of torches are held up, which tells the column where the sought letter is found. Needless to say, this signalling scheme is somewhat slow, but it can be used as a cryptosystem in the following way: We first adopt the system to the Latin alphabet. Since there are 26 letters, but only 25 cells in a five by five square, one letter must be sacrificed (or we can use e.g. six rows instead of five). Usually the letters I and J are put in the same cell, and treated equally since seldom any ambiguity will arise as to which letter is meant. Here are a typical checkerboard with the Latin alphabet:

	1	2	3	4	5
1	a	b	c	d	e
2	f	g	h	ij	k
3	l	m	n	o	p
4	q	r	s	t	u
5	v	w	x	y	z

To encrypt a text with this crypto, the letters of the cleartext are substituted for two-figure numbers, the first figure of every number telling in which row the cleartext letter stands, and the last figure telling the column. The cleartext Troy has fallen will become 44 42 34 54 - 23 11 43 - 21 11 31 31 15 33 in this checkerboard key.

A number of variants to the key shown above exists. It is possible to use letters to indicate the rows and columns, instead of figures, if one likes. In some cases a different order of the numbers telling the rows and columns, are used, or each row and column is given two figures like this:

	2,6	0,3	1,5	7,9	4,8
6,8	a	b	c	d	e
1,4	f	g	h	ij	k
0,9	l	m	n	o	p
2,7	q	r	s	t	u
3,5	v	w	x	y	z

The user has to choose between one of these two variants, when deciding how to encrypt a certain letter, and it is -of course - possible to choose different cipher numbers for the same letter occuring some place else in the message, thus hiding repetitions, like this:

Message: T H E B A T T A L I O N
 Cipher: 7 1 6 8 6 29 79 62 02 17 09 91
 7 5 8 3 6

I S M O V I N G S O U T H
 1 2 0 9 3 47 05 10 75 99 24 79 11
 9 1 0 9 2

Commonly, one would put these numbers together to form standard five-figure groups before transmission, like this:

77156 88366 29796 20217 09911 92100 99324 70510 75992 47911

A nifty checkerboard variant exists, where some of the letters - usually the ones occuring most frequent in the language in question - receives single figure cryptosymbols, and the rest gets two-figure combinations just as above. Lets say the key looks like this:

	7	4	1	0	8	5	2	9	6	3
	A	S	I	N	T	O	E	R		
6	B	C	D	F	G	H	J	K	L	M
3	P	Q	U	V	W	X	Y	Z	.	/

The first row containing letters is formed by the mnemonic phrase A sin to err, with the last r dropped (The phrase happens to contain the eight most frequent letters of English.). Then the rest of the alphabet is listed in order in two rows of ten letters, ending with a period mark and a slash (the slash may be used to separate words when ambiguity would arise if they were written together). The figures in the top row and at the last two positions of the first column, are used as coordinates to refer to a cell in the table, containing the letter to be encrypted. The first row of letters are encrypted as single figures, the second row of letter gets two-figure numbers commencing with the number 6, and the letters of the last row gets two-figure numbers commencing with the number 3. As can be seen by looking at the table, the figures 6 and 3 can not be single-figure numbers, but must commence, or be part of, a two-figure

number. Thus, there is no danger involved if one runs the numbers of a cryptogram together as a string, or in five-figure groups. It is always possible to decrypt such a cryptogram without any ambiguity as to which figures are to be read as single-figures, or which figures are to be treated as two-figure numbers. The string:

645636331016478150

can only be divided in one way, thus:

64-5-63-63-31-0-1-64-7-8-1-5-0

By referring to the table above, the cleartext communication is easily derived. As can be seen, only five out of a total of thirteen letters are encrypted as two-figure numbers, thus shortening the cryptogram and the transmission time needed substantially.

The following cryptogram uses the above table, but different order of the coordinates. Try and see if it is breakable; the cleartext is in English, military language:

13492 09610 41763 07431 46918 65737 67721 86111 11581 71559 14176 30710

* Simple Substitution using an Unordered Alphabet

In the systems described so far the normal sequence of the alphabet has been used, but one can of course use an unordered sequence of letters or numbers as cipheralphabet. The classical method uses a keyword to achieve this. Any word or phrase will do, but all repeated letters must be deleted. If the keyword is RAMSES the following cipherkey can be constructed:

Clear text: abcdefghijklmnopqrstuvwxyz

Cipher text: RAMSEBCDFGHIJKLMNOPQTVWXYZ

A major drawback of this system, is the fact that towards the end of the alphabet the cleartext letters tend to be encrypted by themselves if the keyword doesn't contain, say, an "X", "Y", or "Z". To counter this the users can agree to start writing the keyword and the rest of the letters, at a different starting position than the letter "A". The starting position can even be varied from message to message, and this information can be hidden somewhere in the cryptogram. For instance, when starting with the keyword under the letter "f", the result will be the following key:

Clear text: abcdefghijklmnopqrstuvwxyz

Cipher text: VWXYZRAMSEBCDFGHIJKLMNOPQTU

Suppose the starting position is hidden as the third letter of the resulting cryptogram, then the following table will illustrate the use of the above key:

Message: de*sperate needof supplies
Cipher: YZFKHZJVLZ FZZYGR KNHHCSZK

* WORLDWIDE JAM SESSION pt.2 *

In WORLDWIDE JAM SESSION pt.1, I mentioned the 'Backward Music station' as example of a pre-recorded jamming signal. This is not correct. The BM stations do not transmit music. There are however jammers who really do transmit distorted or backward music.

-O-O-O-O-O-O-O-O-O-O-

The VOA has an interesting page about jamming; ''Jamming - a technical response to a political problem'' is the title.

There is a selection of jamming types used against various international broadcast language services. The samples are in RealAudio and Sun format (.ra and .au).

A good explanation of jamming, albeit a bit out of date, is contained in the classic VOA Monitoring presentation called "The Sounds of Jamming." You can hear all 14.5 minutes of it in RA here.

URL: <http://voa.his.com/jamming.html>

-O-O-O-O-O-O-O-O-O-O-

New book: ''JAMMING'' by Rimantas Pleikys

'Jamming' is a comprehensive, 164-page book about the jamming system of the former Soviet Union and its allies. It includes a historical and technical review from Cuba to North Korea. The book is written in the English language.

The author of the book is fellow dx-er Rimantas Pleikys, former Minister of Communications and Informatics of the Republic of Lithuania. Rimantas is now Member of Parliament of Lithuania.

Price: US\$ 14.95 (plus US\$ 2.00 for airmail delivery)

Distributor:

Mr. Sigitas Zilionis, P. d. 985, LT-2300 Vilnius, Lithuania.

E-mail: dx@is.lt

A must have for everyone who is interested in the history of jamming. I read the book in one day, which should indicate how much I like it :-)

-0-0-0-0-0-0-0-0-0-0-

Thanks to the dxers who sent me their jammer logs, I was able to compile a list of jammed frequencies in the 4,5 and 6 MHz bands.

Note:

Most of the Lincolnshire Poacher and Cherry Ripe frequencies are jammed from time to time. Some even on a daily basis. The jammer is Iran.

VOA, Voice of Free Asia, Radio Free Europe and Radio Freedom also experience jamming of various Asian language broadcasts. Jammers are China, Tibet, Burma, Vietnam and N.Korea.

VOA's Farsi programs are being jammed by Iran. Cuba jams Radio Marti, Radio Miami and various other stations who transmit Cuban freedom stations.

The Voice of Mojahed operates on many frequencies and is being jammed by Iran. Lots of other clandestine stations are being jammed by various countries. Iran, Iraq and Turkey are jamming a number of Kurdish radio and tv stations.

Freq.	time/date	Jammer type + station being jammed
1566	1750	Bubble. Iran VIRI
3840	1000	Reverberator. Vo National Salvation
4120	1000	Reverberator. Vo National Salvation
4418	1700/160498	Chirp2 in ssb mode.
4422	1900	Bubble.
4430	1900	Bubble.
4440	1900	Bubble.
4448	1656/160498	Chirp1 in dsb full carrier. broadcaster
4450	0202/270498	Bubble.
4450	0227/290498	Bubble & Pulser.
4450	1000	Reverberator. Vo National Salvation
4461	0202/270498	Bubble.
4462	1900	Bubble.
4470	0201/270498	Bubble.
4470	1900	Bubble.
4485		Bubble.
4485	0223/260498	Bubble. Music faintly audible
4615	1900	Bubble.
4620	1900	Bubble.
4630	1900	Bubble.
4639	0209/270498	Bubble.
4639	0228/290498	Bubble.

4640	1900	Bubble.
4645		Warble.
4645	0209/270498	Bubble. (same as above)
4645	0220/260498	Bubble. (same as above)
4645	0224/280498	Bubble. (same as above)
4645	0251/240498	Bubble. Tallin ATIS audible - no sign of any cland.
4649	0210/270498	Bubble.
4650	1900	Bubble.
4660		Warble.
4670	1900	Bubble.
4679	0222/260498	Bubble.
4679	0223/280498	Pulser.
4679	1814/150498	Bubble.
4680		Bubble.
4818	1645/160498	Chirp2 (slower chirp) in dsb. broadcaster
4820	1900	Bubble.
4830	1900	Bubble.
4850	0154-0220	Bubble. VO Mojahed
4852	0212/270498	Bubble.
4860		Bubble. cland
4862	1900	Bubble.
4865	0222/280498	Bubble. OM presenter just audible under QRM
4865	0229/290498	Bubble & Pulsers.
4875	0212/270498	Bubble.
4878	1641/160498	Chirp1 in dsb no carrier. broadcaster
4880		Bubble. Mossad
4880	1816/150498	Pulser. Blank AM carrier + Single letter 'V' in CW
4945	1845	Pulse.
5120	1900	Bubble.
5125		Fast bubble.
5130	1900	Bubble.
5142	0214/280498	Bubble.
5160	0214/280498	Bubble. Carrier just detected
5160	0217/260498	Pulser.
5170	0218/260498	Bubble.
5180	0158/270498	Rapid Pulser.
5320	1900	Bubble.
5330	0219/260498	Pulser.
5330	0226/290498	Pulser & Bubble.
5340	0159/270498	Rapid Pulser.
5350		Bubble.
5350	1900	Bubble.
5351		Bubble (not the same as 5350).
5351	0159/270498	Pulser.
5358		Fast bubble.
5361	0200/270498	Bubble.
5370		Bubble. unmodulated AM carrier
5370	0216/280498	Bubble.

5422 Bubble. YL numbers stn
5617 1900 Bubble.
5618 0201/230498 Bubble. Clandestine OM presenter
5618 0225/290498 Bubble. Causing QRM to Shanwick on 5616 kHz
5620 0157/270498 Bubble. Carrier just audible
5620 0223/290498 Bubble.
5620 0255/240498 Bubble. VO Mojahed
5623 1719/160498 Chirp3 (the "frying canary").
5629 1808/150498 Rapid Pulser.
5630 Fast bubble.
5630 0205/230498 Bubble. VO Mojaed
5630 0211/280498 Bubble. Clandestine just audible with YL presenter
5630 0254/240498 Rapid Pulser.
5636 0216/260498 Bubble.
5640 0209/280498 Bubble. Blank AM Carrier
5640 0230/260498 Bubble. Blank AM Carrier
5640 0233/290498 Bubble. Clandestine clearly heard when off
5642 1900 Bubble.
5647 0211/260498 Bubble.
5648 1708/160498 Chirp1 in dsb. some arabic or farsi broadcaster
5649 1807/150498 Pulser.
5650 0156/270498 Bubble.
5650 0207/280498 Bubble. Clandestine just audible with YL presenter.
5650 0215/260498 Bubble.
5650 0223/290498 Bubble.
5650 0244/240498 Bubble.
5658 Bubble. blocking Bombay aero
5658 0214/260498 Bubble.
5658 1601/160498 Chirp. broadcaster
5660 0206/230498 Bubble. Clandestine - YL presenter
5660 0229/270498 Bubble. carrier just detected
5660 1745 Warble. Cland.? with a marching song and unid language
5668 0243/240498 Rapid Pulser.
5670 0157/230498 Pulser. Clandestine - YL Presenter
5670 0206/280498 Rapid Pulser (same as above).
5670 0223/290498 Rapid Pulser (same as above).
5670 0220 Bubble. VO Mojahed
5670 0253/240498 Bubble. Blank AM Carrier
5670 1647/160498 Bubble.
5670 1806/150498 Bubble.
5678 0242/240498 Bubble.
5678 1707/160498 Chirp1 in double side band.
5679 0212/260498 Bubble.
5680 Bubble.
5680 0149/240498 Bubble and Pulsers.
5680 0150/270498 Bubble.
5680 0201/230498 Bubble.
5680 0203/280498 Bubble. carrier just audible

5680	0203/290498	Bubble. Clandestine very clear OM presenter
5680	1633/270498	Bubble.
5680	1654/260498	Bubble. Iraqi Clandestine?
5720		Wide bubble.
5720	0241/240498	Bubble.
5730	1900	Bubble.
5734	1704/160498	Chirp1 in dsb.
5736	0204/280498	Bubble. AM Carrier detected
5740		Bubble.
5746	1706/160498	Bubble.
5747	0152/270498	Bubble.
5750	0153/270498	Bubble.
5750	0202/230498	Bubble. Clandestine
5750	0222/290498	Bubble.
5750	1707/160498	Bubble. Vo Mohajed
5754	1803/150498	Bubble.
5756	1900	Bubble.
5760	0222/290498	Bubble.
5763	1900	Bubble.
5766	0232/260498	Bubble.
5770	0223/270498	Bubble.
5770	1804/150498	Bubble.
5778	0155/270498	Bubble.
5780	0231/260498	Bubble.
5783	0221/270498	Bubble.
6167	1915-1945	Bubble. Vo Mohajed
6175	1915-1945	Bubble. Vo Mohajed
6220	0219/280498	Bubble. AM Carrier detected
6220	0230/290498	Bubble.
6221	1900	Bubble.
6230	1900	Bubble.
6240	0227/260498	Bubble. Blank AM Carrier
6240	0233/290498	? Clandestine in clear with Arabic music
6245	1900	Bubble.
6250	0217/270498	Bubble. AM Carrier detected
6250	1900	Bubble.
6251	0218/280498	Bubble. AM Carrier detected
6259	2249	?. La Voz de La Resistencia -CLM-
6262	1900	Bubble.
6263	0217/280498	Bubble.
6270	1915-1945	Bubble. Vo Mohajed
6955	1900	Bubble.
7070		Warble/Bubble. Vo the Palestine Islamic Revolution
8320	1200	Diesel engine room / wind tunnel. Cherry Ripe
9251	2200	Bubble. Lincolnshire Poacher
9955		Pulse. Radio Miami jammed by Cuba
9958	0200-0300	Warble. unid spanish station
11540	1900-2300	Bubble. Radio Kudriat (UDFN)

12056 1200 Diesel engine room / wind tunnel. Cherry Ripe
14487 0900-1700 Bubble. Lincolnshire Poacher

Numbers + Oddities Logs column # 05, August 1998

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Moin, Moin, welcome to the logs. Our log format is as follows:
FREQ c/s Station Enigma-Code rest in free format should include time,
date, mode, details and initials. Please write 10/aug for 10th of august,
not 1008 or 0810.

Please note that i can only include logs in the column which stick to this
format. In this column I include logs posted to the spooks or wun mailing
lists or to Ary or myself privately. For a reference of the enigma desig-
nators see n+o newsletter no.1. If you want to remain anonymous, just send
your logs to me or Ary with a note saying so.

I'll be on vacation in September so please do not post logs to me but to
the list or to Ary only. I will be back in the october issue of the news-
letter.

Lots of great loggings again this time. Please take a look at the contri-
butors list at the end to see who is responsible for this great source of
number stn information.

* Logs *

2743 Mossad (E10) 2300 (28-07-98) AM id ULX (DR)
2743 Mossad (E10) 2300 (01-08-98) AM id ULX (DR)
3150 Mossad (E10) 2300 (01-08-98) AM id PCD (DR)
3270 MOSSAD (E10) 1915 AM 2/aug KPA2 // 4665, 5230 [JRU]
3329 0100 Tuesday 7/28/98 Atencion/V2 YL/SS rptg "A 02002 26832
65593". At 0103, into 5FG. (JM4)
3389 0100 Tuesday 8/11/98 Atencion/V2 YL/SS 5FG in progress. JM4
3410 M17 Mon 3/8/98 2030 66627 21 (GD2)
3410 M17 Thurs 20/8/98 2030 66288 28 (GD2)
3410 M17 Thurs 6/8/98 2030 66335 26 (GD2)
3410 M17 Weds 19/8/98 1900 70269 24 (GD2)
3410 M17 20.30 (July 27) CW 66128 dots 27 27 = 5FG VA (AB)
3417 Wed 29.07.98 1930 E10 Mossad ART2 (HFD)
3417 Mossad (E10) 2130 (25-07-98) Alpha Romeo Tango callup (DR)
3417 Mossad (E10) 2130 (27-07-98) AM id ART (DR)
3417 Mossad (E10) 2130 (28-07-98) AM id ART (DR)
3417 Mossad (E10) 2130 (30-07-98) AM id ART (DR)
3417 Mossad (E10) 2130 (31-07-98) AM id ART (DR)

3417 MOSSAD (E10) 1849 AM 2/aug ongoing msg [JRU]
3417 MOSSAD (E10) 1902 AM 2/aug ART2 [JRU]
3417 Mossad (E10) 2130 (06-08-98) AM id ART (DR)
3485 Mossad (E10) 2045Z (25-07-98) SYN2 (VM)
3824 M10 Sun 2/8/98 2000 111x3 13071x3 30x3 (GD2)
3840 MOSSAD (E10) 1833 AM 2/aug YHF msg, groups 84, hebraeic
intonation, // 3150, another msg. (61 groups) from 1847 [JRU]
3840 Mossad (E10) 2009 (06-08-98) AM In progress (DR)
3910 M17 numbers station, 20.50 (July 27) CW 66128 dots 27 27 = 5FG
VA. Repeat of 20.30 UTC (AB) 015 M3 Mon 3/8/98 0630 033/52 Very
weak signal (GD2)
4015 M3 Mon 17/8/98 0630 035/00. Same as 1997 (GD2)
4015 M3 Weds 19/8/98 0630 035/00 (GD2)
4024 M51 numbers station, F 22.09 (July 27) CW NR 77 J 28 00:09:19
1998 BT + 5LG. Busy as ever (AB)
4025 M51 numbers station, F 22.09 (July 27) CW NR 77 J 28 00:09: BT +
5LG. Busy as ever (AB) 4027 cut no's stn M8 08/07/98 0300Z (BR)
4028 SPANISH LADY (V2) 1142Z (13.07.98) AM in progress (SD)
4036 V2 "Atencion" station. 1100UTC, 05 August. 5FG, ended with three
"final". Signal very poor, faded out to unintelligibility a few
times. (JL)
4041 Unid. Transmitted only 3 mins, 19.40 (Aug 5) CW Message
TETINSITEEAEMNL. Over and over again (AB)
4042.4 Dashless morse station, 22.10 (Aug 3) CW Unid station trans-
mitting groups of dots (AB)
4130 E15 Wed 29.07.98 1900 Phonetic Alphabet Pre-NATO PAR (HFD)
4130 Phonetic alphabet-pre NATO (E15) 2102 (22-08-98) USB id
unintelligible (DR)
4270 Mossad Wed 29.07.98 1900 PCD (HFD)
4270 Mossad (E10) 2033 (31-07-98) AM id PCD (DR)
4270 Mossad (E10) 2130 (27-07-98) AM id PCD (DR)
4270 Mossad (E10) 2130 (28-07-98) AM id PCD (DR)
4270 Mossad (E10) 2131 (25-07-98) Papa Charlie Delta callup (DR)
4360 Mossad (E10) Wed 29.07.98 1945 SYN2 // 6370 (HFD)
4360 Mossad (E10a) 2245 (22-07-98) AM SYN2 callup (DR)
4460 Mossad, ISR 20.00 (July 27) AM FTJ2 broadcast (AB)
4460 Counting Station (E5) 0003 (22-08-98) USB id 248 count 90 (DR)
4460 Mossad (E10) 2101 (29-09-98) AM id FTJ (DR)
4460 Mossad (E10a) 2132 (28-07-98) AM id FTJ2 (DR)
4463 Mossad (E10) Wed 29.07.98 1900 FTJ, msg (HFD)
4463 Mossad (E10) 0102 (22-08-98) AM id FTJ (DR)
4463 Mossad (E10) 2032 (19-08-98) AM id FTJ group 145 (DR)
4463 Mossad (E10) 2110 (25-07-98) AM In progress (DR)
4463 Mossad (E10) 2203 (19-08-98) AM id FTJ group 44 (DR)
4463 Mossad (E10) 2244 (22-07-98) AM In progress then FTJ callup (DR)
4463 Mossad (E10a) 0002 (20-08-98) AM id FTJ2 no message (DR)
4463 Mossad (E10a) 0002 (22-08-98) AM id FTJ2 no message (DR)
4463 MOSSAD (E10) 1904 AM 2/aug ongoing msg. [JRU]

4478 cut no's stn M8 08/08/98 0300Z (BR)
 4479 V2 "Atencion". 0300UTC, 12/August. 5FG. End at 0345UTC with three
 "final". ?//6826? (JL)
 4479 V2 0300 Wednesday 8/12/98 Atencion YL/SS rptg "A 09041 80089
 64833" and into 5FG. JM4
 4479 V2 0300 Wednesday 8/5/98 strong carrier, but regular Atencion
 broadcast didn't materialize. JM4
 4479 V2 0400 Friday 8/7/98 Atencion YL/SS 5FG in progress. JM4
 4479 Atencion stn V2 08/05/98 0300Z - vy weak audio (BR)
 4479 Atencion stn V2? 08/07/98 0400Z - had started before the hour (BR)
 4506 cut no's stn (M8) 0100 Jul 23/98 CW (BR)
 4506 cut no's stn M8 08/05/98 0300Z (BR)
 4506 cut no's stn M8 08/07/98 0400Z (BR)
 4509 M1 Tues 4/8/98 2000 025 R4 503 503 43 43 = = (GD2)
 4615 M13 Thurs 20/8/98 2100 751 R5 = 169 23 = (GD2)
 4640 E5 Cynthia. 0011UTC, 11/August. In progress ?//of 5046? Count:
 109 3/2 FG. Repeated the count at 0021UTC. "End" 0030UTC. (JL)
 4640 //5046 Counting Station (E5) 0001 (18-08-98) USB id 026 count 90
 (DR)
 4640 //5046 Counting Station (E5) 0001 (21-08-98) USB id 248 count 90
 (DR)
 4640 //5046 Counting Station (E5) 0002 (19-08-98) USB id 248 count 90
 (DR)
 4640 //5046 Counting Station (E5) 0002 (20-08-98) USB id 248 count 90
 (DR)
 4640 //5046 counting stn (E5) 0000 Jul 28/98 AM with msg 888 count 85
 (BR)
 4640 //5046 counting stn (E5) 1900 Jul 28/98 AM very weak (BR)
 4640 //5046 counting stn (E5) 1900Z msg 912 count 109 (BR)
 4640 //5046 counting stn E5 07/31/98 0000Z with 888/85 msg (BR)
 4640 //5046 counting stn E5 08/04/98 0000Z with 888/85 msg (BR)
 4640 //5046 counting stn E5 08/07/98 0000Z with 888/85 msg (BR)
 4640 //50461900 AM12/july The Counting Stn Msg to 888, Count 85 (rpt
 of 1900z) (CS)
 4640 //5056 counting stn E5 08/01/98 0000Z with 888/85 msg (BR)
 4640 //5046 on Aug 1at 0000UTC... Callup for 888 and 85 groups (so its
 not *always* count 215)(TM)
 4665 Mossad (E10) Wed 29.07.98 1915 KPA2 (HFD)
 4665 MOSSAD (E10) 1817 AM 2/aug KPA2 [JRU]
 4740 M17 numbers station, 21.10 (July 27) CW 66128 dots 27 27 = 5FG
 VA. Repeat of 20.30 UTC (AB)
 4840 Mossad (E10a) 2200 (22-07-98) AM Uniform Lima X-ray 2 callup (DR)
 4880 Mossad (E10) Wed 29.07.98 1900 ULX, msg, gr 48,
 4880 Mossad (E10) 0102 (22-08-98) AM id ULX group 54 (DR)
 4880 Mossad (E10) 0200 (20-08-98) AM id ULX group 54 (DR)
 4880 Mossad (E10) 2131 (31-07-98) AM id ULX (DR)
 4880 Mossad (E10) 2302 (20-08-98) AM id ULX group 80 (DR)
 4880 Mossad (E10a) 0300 (20-08-98) AM id ULX2 no message (DR)

4880 Mossad (E10a) 2131 (27-07-98) AM id ULX2 (DR)
 4880 Mossad (E10a) 2131(28-07-98) AM id ULX2 (DR)
 4880 Mossad (E10a) 2132 (25-07-98) Echo Lima X-ray 2 callup (DR)
 4880 Mossad (E10a) 2132 (30-07-98) USB? idULX2 (DR)
 4880 MOSSAD (E10) 1818 AM 2/aug ongoing msg. [JRU]
 4904 M1 Thurs 20/8/98 2000 025 R4 456 456 33 33 = = (GD2)
 4904 M1 Tues 18/8/98 2000 025 R4 517 517 40 40 = = (GD2)
 4905 M1A numbers station, 20.00 (July 28) CW id 025. Unexpected end of
 the month transmission (AB)
 4905 M1 Thurs 6/8/98 2000 025 R4 072 072 43 43 = = (GD2)
 4905 M1A numbers station, 20.00 (July 28) CW id 025. Unexpected end of
 the month transmission (AB)
 5002 Ticking station, 19.47 (Aug 5) MODE??? Transmits groups of
 ticks/clicks. Weird! (AB)
 5027 S17 Czech Lady Control 70041 //4485 Fri 03.07.98 1355 (HFD)
 5027 S17 Czech Lady Control 70038 //4485 Fri 31.07.98 1355 (HFD)
 5028 M10 21.00 (July 27) CW 555x3 783x3 32 961x3 50 (AB)
 5028 M10 Mon 17/8/98 1645 555x3 571x3 13 275x3 25 049x3 15 435x3 20
 (GD2)
 5028 M10 Mon 17/8/98 2100 555x3 783x3 44 961x3 40 (GD2)
 5028 M10 Mon 3/8/98 1645 555x3 571x3 10 275x3 45 049x3 39 435x3 30
 (GD2)
 5028 M10 Mon 3/8/98 2100 555x3 783x3 11 961x3 41 (GD2)
 5028 M10 Sat 22/8/98 1645 555x3 571x3 19 275x3 12 049x3 13 435x3 31
 (GD2)
 5028 M10 Sat 8/8/98 1645 555x3 571x3 38 275x3 18 049x3 29 435x3 16
 (GD2)
 5028 M10 Sun 16/8/98 1645 555x3 571x3 13 275x3 25 049x3 15 435x3 20
 (GD2)
 5028 M10 Sun 2/8/98 1645 555x3 571x3 10 275x3 45 049x3 39 435x3 30
 (GD2)
 5028 M10 Weds 19/8/98 1645 555x3 571x3 13 275x3 25 049x3 15 435x3 20
 (GD2)
 5028 M10 Weds 19/8/98 2100 555x3 783x3 44 961x3 44 (GD2)
 5028 M10 Weds 5/8/98 1645 555x3 571x3 10 275x3 45 049x3 39 435x3 30
 (GD2)
 5028 M10 Weds 5/8/98 2100 555x3 783x3 11 961x3 41 (GD2)
 5046 Counting Station (E5 or V5 ?) EE 0000 AM 3/2 D #'s 1234567890 888
 S9 Here 22& 23 Jul '98 (WCA)
 5046 E5 Cynthia. 0006UTC, 11/August. In progress, very noisy signal.
 Preamble: 912 Count: 109 3/2 FG. "End" at 0030UTC. (JL)
 5046 //4640 Counting Station (E5) 0001 (17-08-98) USB id 912 count 109
 (DR)
 5046 Counting Station 0000 AM 3/2 D YL EE Numbers station (WCA)
 5073 M13 Mon 3/8/98 2100 378 R5 = 202 18 = (GD2)
 5090 M3 Mon 17/8/98 0700 040/00. Same as 1997 (GD2)
 5090 M3 Mon 3/8/98 0700 040/00 (GD2)
 5090 Mossad (E10) 2131 (27-07-98) AM id JSR (DR)

5090 Mossad (E10) 2132 (30-07-98) AM? id JSR (DR)
5091 Mossad (E10) 2131 (28-07-98) AM id JSR (DR)
5091 Mossad (E10a) 2133 (25-07-98) Juliet Sierra? Romeo 2 callup (DR)
5091 Mossad, ISR 21.00 (July 26) AM JSR2 broadcast (AB)
5091 Mossad, ISR 21.00 (July 26) AM JSR2 broadcast (AB)
5091 Wed 29.07.98 1930 E10 Mossad JSR (HFD)
5116 M8 0212UTC, 14/August. ?gmgrn? In progress. (JL)
5120 M3 Thurs 6/8/98 0700 3 Groups = = 000 (GD2)
5120 M3 Thurs 6/8/98 0730 018/00 (GD2)
5120 M3 Tues 18/8/98 0730 041/00 (GD2)
5178 Backward music station, 22.07 (July 25) (AB)
5178 Backward Music station, 22.57 (July 18) same signal strength as
6753 (AB)
5178 Backward Music station, 21.49 (Aug 3) TONES not // with 6695 and
6753 kHz (AB)
5180 M3 Mon 17/8/98 0730 018/00 (GD2)
5180 M3 Mon 17/8/98 0830 044/00 (GD2)
5180 M3 Mon 17/8/98 0930 018/00 (GD2)
5180 M3 Mon 3/8/98 0730 010/57 R10 Same as 1997 (GD2)
5180 M3 Thurs 20/8/98 0730 018/00 (GD2)
5180 M3 Tues 4/8/98 1400 045/53 (GD2)
5180 M51 Weds 5/8/98 0700 NR 58 To NR 72. Ended 0830 (GD2)
5180 Cherta (S12) 2103 (5-8-98) 971/00 (VM)
5190 M3 Mon 3/8/98 0830 043/50 (GD2)
5220 M1B Mon 17/8/98 1718 719 R4 061 061 42 42 (GD2)
5220 M1B Mon 3/8/98 1718 719 R4 974 974 46 46 = = (GD2)
5220 M1B Weds 19/8/98 1718 719 R4 061 061 42 42 = = (GD2)
5220 M1B Weds 5/8/98 1718 719 R4 974 974 46 46 = = (GD2)
5230 Mossad (E10) Wed 29.07.98 1915 KPA2 (HFD)
5230 Mossad (E10) KPA2, 0219, USB, KPA2 (Marker - Female, EE - OTA
0220Z - Wed)(JP)
5246 M14 Frid 7/8/98 1800 491 R4 195 195 32 32 = = (GD2)
5278 M1A numbers station, 18.00 (July 28) CW id 025. Unexpected end of
the month transmission (AB)
5278 M1 Thurs 20/8/98 1800 Nil heard (GD2)
5278 M1 Thurs 6/8/98 1800 025 R4 731 731 44 = = (GD2)
5278 M1 Tues 18/8/98 1800 025 R4 031 031 46 46 = = (GD2)
5278 M1 Tues 4/8/98 1800 025 R4 216 216 42 42 = = (GD2)
5278 M1B Thurs 6/8/98 1723 382 R4 426 426 43 43 = = (GD2)
5278 M1A numbers station, 18.00 (July 28) CW id 025. Unexpected end of
the month transmission (AB)
5290 Russian Lady (S21) 1945 (20-08-98) AM id 491? (DR)
5301 M10 Mon 17/8/98 1610 555x3 553x3 43 859x3 24 (GD2)
5301 M10 Sun 2/8/98 1610 555x3 107x3 28 859x3 13 (GD2)
5325 M1B Frid 21/8/98 2102 871 R4 128 128 43 43 = = (GD2)
5325 M1B Frid 7/8/98 2102 871 R4 682 682 65 56 = = (GD2)
5350 M1B Sat 22/8/98 1605 053 R4 618 618 40 40 = = (GD2)
5350 M1B Sat 8/8/98 1605 053 R4 528 528 43 43 = = (GD2)

5360 M3 Weds 5/8/98 0830 043/50. Same as 1997 (GD2)
 5365 S6 Russian Man, RUS 21.00 (July 26) AM 826 00000 (AB)
 5365 M3 Frid 7/8/98 0630 121/40. Same message sent Wednesday 29 July 1800 (GD2)
 5365 M3 Frid 7/8/98 0800 041/00 Same as 1997 (GD2)
 5365 M3 Weds 5/8/98 1500 046/00 (GD2)
 5365 M3 Weds 5/8/98 1700 121/45 (GD2)
 5365 S6 Russian Man, RUS 21.00 (July 26) AM 826 00000 (AB)
 5416 M8 cut no's stn 08/05/98 0300Z (BR) 5417 V2/SS/YL/5FG 0705UTC. In progress; there was what seemed to be ?interference? from a ?data? transmission that sounded something similiar to a constant ringing of a high pitched bell. Really strong signal this time, was finally able to determine what was being said at the end of the transmission: ended at 0746UTC with three "finals'". (JL)
 5419 M8 cut no's stn 08/03/98 0200Z CW (BR)
 5422 LP (E3) Fri 31.07.98 1700 ID: 82534
 5422 //6484//8464 LP (E3) 1800 (24-07-98) USB 82534 callup (DR)
 5422 //6484//8464 LP (E3) 1809 (31-07-98) USB id 82534 (DR)
 5422 //6485//8464 LP (E3) 1700 (06-08-98) USB id 04242 (DR)
 5422 //6485//8464 LP (E3) 1700 (20-08-98) USB id 73110 (DR)
 5422 //6485//8464 LP (E3) 1700 (30-07-98) USB (DR)
 5422 //6485//8464 LP (E3) 1800 (07-08-98) USB id 04242 (DR)
 5422 //6485//8464 LP (E3) 1803 (21-08-98) USB id 73110 (DR)
 5422 //6485//8464 LP (E3) 1900 (01-08-98) USB id 04242 (DR)
 5422 //6485//8464 LP (E3) 1900 (25-07-98) USB 82534 callup (DR)
 5422 //6485//8464 LP (E3) 1902 (22-08-98) USB id 73110 (DR)
 5422 //6485//8464 LP (E3) 1906 (08-08-98) USB id 04242 (DR)
 5422 //6485//8464 LP (E3) 2207 (02-08-98) USB id 04242 (DR)
 5422 //6485//8464 LP (E3) 2207 (16-08-98) USB id 73110 (DR)
 5428 M12 numbers stations, 19.00 (July 26) CW 941 000 (AB)
 5428 M12 Weds 19/8/98 1900 941x3 000 (GD2)
 5428 M12 Weds 5/8/98 1900 941x3 000 (GD2)
 5435 Mossad (E10) Wed 29.07.98 1930 ART2 (HFD)
 5435 Mossad AM 0300 Friday 8/7/98 YL/EE rptg "ART" and into 5LG. JM4
 5435 Mossad AM 0300 Monday 8/10/98 YL/EE rptg "ART" weak JM4
 5435 Mossad AM 0300 Monday 8/3/98 5LG in progress - weak. (JM4)
 5435 Mossad AM 0300 Sunday 8/16/98 YL/EE rptg "ART2" then down at :03. JM4
 5435 Mossad AM 0300 Wednesday 8/12/98 YL/EE rptg "ART" and into 5LG. JM4
 5437 Mossad (E10) 1814 (22-07-98) AM In progress (DR)
 5437 Mossad (E10a) 1800 (28-07-98) AM id ART2 (DR)
 5447 LP (E3) Wed 29.07.98 1900 id 99843
 5472 M45 17.03 (July 28) CW 074 (R4) 296 296 296 46 46 == 5FG (AB)
 5472 M45 7.03 (July 28) CW 074 (R4) 296 296 296 46 46 == 5FG (AB)
 5473 M1B Sat 22/8/98 1510 745 R4 375 375 44 44 = = (GD2)
 5473 M1B Weds 19/8/98 1510 745 R4 385 385 44 44 (GD2)
 5473 M1B Weds 5/8/98 1510 745 R4 375 375 44 44 = = (GD2)

5474 M45 Thurs 20/8/98 1702 074 R4 134 134 42 42 = = (GD2)
5474 M45 Thurs 6/8/98 1702 074 R4 296 296 46 46 = = (GD2)
5474 M45 Tues 18/8/98 1702 074 R4 134 134 42 42 = = (GD2)
5474 M45 Tues 4/8/98 1702 074 R4 296 296 46 46 = = (GD2)
5520 M3 Frid 21/8/98 0730 041/00 (GD2)
5520 M3 Thurs 20/8/98 0630 041/59 (GD2)
5520 M3 Thurs 20/8/98 0800 017/00 (GD2)
5520 M3 Thurs 20/8/98 0900 011/00 (GD2)
5520 M3 Thurs 6/8/98 0630 044/56 Repeat of Tues 4/8 (GD2)
5520 M3 Thurs 6/8/98 0800 016/50. Same as 1997. Same message (GD2)
5520 M3 Thurs 6/8/98 0900 015/58. Same as 1997 (GD2)
5520 M3 Tues 18/8/98 0630 041/59 (GD2)
5520 M3 Tues 4/8/98 0630 044/56 Same as 1997 (GD2)
5520 M3 Frid 7/8/98 0730 040/00 Same as 1997 (GD2)
5530 Mossad (E10) Wed 29.07.98 1915 MIW2 (HFD)
5530 Mossad (E10) 1815 (22-07-98) AM MIW callup (DR)
5530 Mossad (E10) 1824 (23-07-98) AM MIW callup (DR)
5530 MOSSAD (E10) 1919 AM 2/aug MIW2 [JRU]
5550 M3 Thurs 20/8/98 0830 019/00 (GD2)
5550 M3 Thurs 6/8/98 0830 019/00 (GD2)
5625 M3 Frid 21/8/98 0830 017/00 (GD2)
5629 Wed 29.07.98 1945 E10 Mossad VLB2 (HFD)
5655 3-note oddity (G4) 2036 (16-08-98) USB? Id? 67890 tx finished at
2049 (DR)
5705 M10 Thurs 6/8/98 1000 111x3 57295. Other 3 IDs Unreadable (GD2)
5737 M1B Thurs 20/8/98 2032 931 R4 128 128 43 43 = = (GD2)
5737 M1B Thurs 6/8/98 2032 931 R4 682 682 65 65 = = (GD2)
5740 3-note Oddity (G4), Sun 05.07.98 2035, 36589 12147... (HFD)
5746 //6484//8464 LP (E3) 1905 (19-08-98) USB id 77350 (DR)
5746 //6484//8464 LP (E3) 2019 (19-08-98) USB In progress (DR)
5746 //6485//8464 LP (E3) 1900 (22-07-98) USB 99843 callup (DR)
5746 //6485//8464 LP (E3) 1908 (29-07-98) USB id 99843 (DR)
5746 //6959//9251 LP (E3) 1800 (21-07-98) USB 99843 callup (DR)
5746 //6959//9251 LP (E3) 1803 (28-07-98) USB id 99843 (DR)
5746 //6959//9251 LP (E3) 1820 (04-08-98) USB In progress (DR)
5746 //6959//9251 LP (E3) 2100 (23-07-98) USB 99843 callup (DR)
5746 //6959//9251 LP (E3) 2100 (26-07-98) USB id 75506 (DR)
5746 //6959//9251 LP (E3) 2104 (30-07-98) USB id 99843 (DR)
5746 //6959//9251 LP (E3) 2106 (02-08-98) USB id 94454 (DR)
5746 //6959//9251 LP (E3) 2106 (03-08-98) USB id 84176 (DR)
5746 //6959//9251 LP (E3) 2106 (20-08-98) USB id 77350 (DR)
5746 //6959//9251 LP (E3) 2107(06-08-98) USB id 41836 (DR)
5746 //6959//9251 LP (E3) 2108 (16-08-98) USB id 66269 (DR)
5746 //6959//9251 LP (E3) 2108 (21-08-98) USB id 10118 (DR)
5746 //6959//9251 LP (E3) 2200 (21-08-98) USB id 77350 (DR)
5746 //6959//9251 LP (E3) 2200 (31-07-98) USB id 99843 (DR)
5746 //6959//9251 LP (E3) 2202 (07-08-98) USB id 41836 (DR)
5746 //6959//9251 LP (E3) 2205 (24-07-98) USB 99843 callup (DR)

5758 M8 cut no's stn 08/07/98 0300Z (BR)
 5762 V2 0200 Saturday 8/15/98 Atencion YL/SS 5FG in progress. JM4
 5762 V2 0200 Saturday 8/8/98 Atencion barely audible due to faulty transmitter. JM4
 5762 Atencion stn V2 08/01/98 0200Z (BR)
 5777 M1B Sun 16/8/98 1855 127 R? Rest U/R (GD2)
 5812 M1B numbers station, 20.10 (July 27) CW 729 682 682 65 65 = = (AB)
 5812 M1B Mon 17/8/98 2010 729 R4 128 128 43 43 = = (GD2)
 5812 M1B Mon 3/8/98 2010 729 R4 682 682 65 65 = = (GD2)
 5820 MOSSAD (E10) 1822 2/aug ongoing msg. [JRU]
 5840 3-note Oddity (G4), Sun 05.07.98 2005, 36589 12147... (HFD)
 5865 M17 Weds 19/8/98 1600 53263 ?? Poor Signal (GD2)
 5865 M17 Weds 5/8/98 1600 53263 25 (GD2)
 5928 Edna sednitser (G22) 2206 (6-8-98) GG/YL 5FG in progress. Id 186 = groups 24 (VM)
 6200 Swedish Rhapsody (E23) 0957 (20-08-98) USB preamble (DR)
 6270 Mossad (E10a) 2202 (04-08-98) AM id ULX2 (DR)
 6283 M1B 19.23 (July 30) CW 382 (R4) 214 214 44 44 == 5FG (AB)
 6283 M1B Thurs 20/8/98 1723 382 R4 426 426 43 43 = = (GD2)
 6283 M1B Tues 18/8/98 1723 382 R5 426 426 43 43 = = (GD2)
 6283 M1B Tues 4/8/98 1723 382 R4 214 214 44 44 = = (GD2)
 6283 M1B 17.23 (July 28) CW 382 (R4) 214 214 44 44 == 5FG (AB)
 6290 M17 19.20 (July 28) CW 58282 (R4) dots 25 25 = 5FG (AB)
 6290 M17 Tues 18/8/98 1920 58392 24 (GD2)
 6290 M8 Mon 3/8/98 0800 06163 61653 82122 (GD2)
 6330 M3 Mon 17/8/98 0900 976/00 (GD2)
 6330 M3 Mon 3/8/98 0900 976/00 (GD2)
 6430 M3 Frid 21/8/98 0930 552/00 (GD2)
 6430 M3 Frid 7/8/98 0930 552/00 (GD2)
 6433 M1 Sat 8/8/98 1500 025 R4 841 841 30 30 = = (GD2)
 6434 M1 Sat 22/8/98 1500 025 R4 263 263 40 40 = = (GD2)
 6484 //7755//10426 LP (E3) 1605 (05-08-98) USB id 04242 (DR)
 6485 //7755//10426 LP (E3) 1600 (22-07-98) USB 82534 callup (DR)
 6485 //7755//10426 LP (E3) 1600 (29-07-98) USB id 82534 (DR)
 6485 //7755//10426 LP (E3) 1606 (19-08-98) USB id 73110 (DR)
 6485 //8464 LP (E3) 1700 (23-07-98) USB 82534 callup (DR)
 6507 Swedish Rhapsody (E23) 1258 (20-08-98) USB preamble (DR)
 6507 Swedish Rhapsody 1000 (06-08-98) USB In progress (DR)
 6520 M3 Tues 18/8/98 0700 010/00 (GD2)
 6569 M29 Mon 17/8/98 1900 Usual call. New message 13x5F (GD2)
 6569 M29 Mon 3/8/98 1900 Usual call (GD2)
 6658 Mossad (E10a) 2315 (16-08-98) AM id MIW2 (DR)
 6675 M17 Tues 4/8/98 1900 58472 24 (GD2)
 6695 Backward Music station, 22.55 (July 18) very strong (+20 db) (AB)
 6736 M14 Weds 5/8/98 2000 Call missed 196 29 186 29 = = (GD2)
 6737 M14 Weds 19/8/98 2000 825 R4 196 196 29 29 = = (GD2)
 6745 Mossad (E10a) 2315 (16-08-98) AM id KPA2 (DR)
 6745 MOSSAD (E10) 1718 USB 31/july KPA2 [JRU]

6749 M29 Mon 17/8/98 1700 Usual call. Message U/R. QRM (GD2)
6750 M29 Mon 3/8/98 1700 Usual call. New Message 14x5F (GD2)
6750 M7 Tues 18/8/98 1700 Call missed 18 18 43 43 000 (GD2)
6753 Backward Music station, 22.56 (July 18) strong but weaker than
6695 kHz (AB)
6768 V2 0100 Saturday 8/15/98 Atencion YL/SS rptg "A 68351 95041
15113" and into 5FG. JM4
6768 V2 0100 Saturday 8/8/98 Atencion barely audible due to faulty
transmitter. JM4
6768 Atencion stn V2 08/01/98 0100Z - three 5-FIG group preamble (BR)
6780 M1 numbers station, 07.00 (July 19) CW 025 (R4) 66331 46 +5FG(AB)
6780 M1 numbers station, 07.00 (July 26) CW 025 036 036 42 42 etc (AB)
6780 M1 Sun 16/8/98 0700 025 R5 207 207 49 49 = = (GD2)
6780 M1 Sun 2/8/98 0700 025 R4 482 482 30 30 = = (GD2)
6782 M12 Frid 21/8/98 1600 749x3 000 (GD2)
6782 M12 Frid 7/8/98 1600 749x3 000 (GD2)
6782 M12 Mon 17/8/98 1600 749x3 1. Rest unreadable (GD2)
6782 M12 Sat 22/8/98 1600 749x3 000 (GD2)
6782 M12 Sun 16/8/98 1600 749x3 000 (GD2)
6782 M12 Sun 2/8/98 1600 749x3 000 (GD2)
6782 M12 Thurs 20/8/98 1600 749x3 000 (GD2)
6782 M12 Thurs 6/8/98 1600 749x3 000 (GD2)
6782 M12 Tues 18/8/98 1600 749x3 1 1748 140 1748 140 (GD2)
6782 M12 Tues 4/8/98 1600 749x3 1 1635 148 1635 148 (GD2)
6782 M12 Weds 19/8/98 1600 749x3 1 1248 144 1248 144 (GD2)
6782 M12 Weds 5/8/98 1600 749x3 1 2372 144 2372 144 (GD2)
6782 V2 "Atencion". 0300UTC, 14/August. Noticed what sounded like
something like an intermittent RTTY transmission buried beneath
the voice. (JL)
6782 V2 0300 Friday 8/7/98 Atencion YL/SS rptg "A 38049 25002 33583"
and into 5FG. Usual //13564 wasn't heard. JM4
6782 M12 Sat 8/8/98 1600 749x3 000 (GD2)
6782 //13564 AM (yes - parallel!) 0300 Friday 7/17/98 Atencion V2
YL/SS rptg "A 38049 52012 58303". Only the second time I've seen
V2 a running parallel - unknown if mixing error.(JM4)
6783 M12 Sun 16/8/98 0710 731x3 000 (GD2)
6786 V2 0600 Wednesday 8/12/98 Atencion YL/SS rptg "Atencion..." once,
then no audio. Gave up on it at :10. JM4
6787 M8 Mon 17/8/98 0700 28983 69281 86701 (GD2)
6787 M8 Mon 3/8/98 0700 06163 61653 82122 (GD2)
6787 M8 Mon 3/8/98 0800 54162 90901 61410 (GD2)
6787 M8 Sat 8/8/98 0700 84883 84551 18761 (GD2)
6787 M8 Thurs 20/8/98 0800 15236 4153 81271 (GD2)
6787 M8 Thurs 6/8/98 0800 84881 71312 87682 (GD2)
6787 M8 Tues 4/8/98 0700 80371 43191 82123 (GD2)
6797 M8 08.00 (July 19) CW DUUUA UDNMN ATWRN == +5LG (cut numbers) (AB)
6797 M8 Frid 21/8/98 0700 07541 44152 81272 (GD2)
6797 M8 Frid 7/8/98 0700 84882 71313 87683 (GD2)

6797 M8 Sun 16/8/98 0800 28982 93393 31743 (GD2)
6797 M8 Sun 2/8/98 0800 06162 61652 82127 (GD2)
6797 M8 Tues 18/8/98 0700 15261 69282 86702 (GD2)
6797 Unid 0454 Tuesday Aug 11 Nice loud "whale sounds," very spooky,
first whales heard in L.A. since 1994 on 4 meg. (HS)
6797 V2 "Atencion" station. 0200UTC, 02 August. 5FG, weak signal
overall. Ended at 0256UTC with three "final". (JL)
6819 M? Weds 19/8/98 1800 111 111 111 000 (GD2)
6825 M8 Sun 16/8/98 0700 28982 93393 31743 (GD2)
6825 M8 Weds 19/8/98 0800 15262 69283 86703 (GD2)
6825 M8 Weds 5/8/98 0800 30372 71311 87681 (GD2)
6825 M8 cut no's stn 1200 Jul 16/98 CW (BR)
6825 M8 cut no's stn 1200 Jul 23/98 CW (BR)
6825 M8 CW 0200 Tuesday Aug 11 Cut # stn (M8), very loud, callup for
"TIRMA" (HS)
6826 V2 "Atencion" station. 0300UTC, 05 August. 5FG, ended with three
"final". (JL)
6826 V2 0300 Monday 8/10/98 Atencion YL/SS rptg "A 25003 55913 24961"
and into 5FG. JM4
6826 V2 0300 Monday 8/3/98 Atencion YL/SS 5FG in progress. (JM4)
6826 V2 0300 Wednesday 8/12/98 Atencion YL/SS 5FG in progress. JM4
6826 V2 0300 Wednesday 8/5/98 Atencion YL/SS rptg "A 38049 05512
25001" and into 5FG. JM4
6826 Atencion stn V2 08/05/98 0300Z (BR)
6840 Mossad (E10) Fri 31.07.98 1700, EZI (HFD)
6840 //9130 Mossad (E10a) 2101 (24-07-98) USB EZI2 callup (DR)
6840 Mossad (E10) 1700 (21-08-98) AM id EZI group 111 (DR)
6840 Mossad (E10) 1700 (23-07-98) AM Echo Zulu India callup (DR)
6840 Mossad (E10) 1740 (22-07-98) AM In progress (DR)
6840 Mossad (E10) 2003 (26-07-98) USB? id EZI (DR)
6840 Mossad (E10a) 2201 (30-07-98) AM id EZI2 (DR)
6840 Mossad (E10a) 2202 (22-07-98) AM Echo Zulu India 2 callup (DR)
6840 MOSSAD E10 2200 19/07/98 ULX2. At 2202 changes to EZI2 until
2204. No message follows. (VM)
6840 MOSSAD (E10) 1601 AM 2/aug EZI, msg. [JRU]
6840 Mossad (E10) 2130 (03-08-98) AM id EZI (DR)
6852 M14 Thurs 6/8/98 2000 631 R4 196 196 29 29 (GD2)
6854 M8 Thurs 6/8/98 0800 80742 16081 75871 (GD2)
6855 M12 Mon 17/8/98 1800 658x3 1 6023 147 6023 147 (GD2)
6855 M12 Mon 3/8/98 1800 658x3 1 4028 141 4028 141 (GD2)
6855 M12 Tues 18/8/98 1800 658x3 1 1748 140 1748 140 (GD2)
6900 LP, CYP 20.00 (July 25) USB Id 89125 (AB)
6900 //10426//11545 LP (E3) 2000 (22-08-98) USB id 51114 (DR)
6900 //10426//11545 LP (E3) 2000 (25-07-98) USB 89125 callup (DR)
6900 //10426//11545 LP (E3) 2005 (08-08-98) USB id 10809 (DR)
6900 //10426//11545 LP (E3) 2009 (01-08-98) USB id 10809 (DR)
6920 M8 Mon 17/8/98 0800 28983 69281 86701 (GD2)
6920 M8 Thurs 20/8/98 0700 15263 44151 81271 (GD2)

6920 M8 Thurs 6/8/98 0700 84881 71312 87682 (GD2)
6933 M8 Sat 22/8/98 0800 12081 23461 87273 (GD2)
6933 M8 Tues 18/8/98 0800 15261 69282 86702 (GD2)
6933 M8 Frid 7/8/98 0800 84882 71313 87683 (GD2)
6934 M12 20.10 (July 25)CW 658 4383 148 + 5FG 000 000 (AB)
6934 M12 Weds 19/8/98 2000 658x3 1 1238 144 1238 144 (GD2)
6934 M12 Weds 5/8/98 2000 658x3 1 2372 144 2372 144 (GD2)
6934 M8 Sat 8/8/98 0800 84883 84551 18761 (GD2)
6947 M51 Mon 3/8/98 0800 NR 79 Ended 0830 (GD2)
6959 //10426//11545 LP (E3) 2204 (17-08-98) USB id 60269 (DR)
6959 //10426//11545 LP (E3) 2205 (27-07-98) USB id 75506 (DR)
6959 //10426//11545 LP (E3) 2206 (03-08-98) USB id 94454 (DR)
6959 //8464//11545 LP (E3) 1700 (17-08-98) USB id 77350 (DR)
6959 //8464//11545 LP (E3) 1700 (27-07-98) USB id 99843 (DR)
6959 //8464//11545 LP (E3) 1708 (03-08-98) USB id 41836 (DR)
6959 //9251//11545 LP (E3) 1800 (22-07-98) USB 61235 callup (DR)
6959 //9251//11545 LP (E3) 1800 (29-07-98) USB id 61235 (DR)
6959 //9251//11545 LP (E3) 1805 (19-08-98) USB id 10118 (DR)
6959 //9251//11545 LP (E3) 1900 (06-08-98) USB id 44340 (DR)
6959 //9251//11545 LP (E3) 1900 (16-08-98) USB id 30394 (DR)
6959 //9251//11545 LP (E3) 1900 (23-07-98) USB 71416 callup (DR)
6959 //9251//11545 LP (E3) 1900 (26-07-98) USB id 71416 (DR)
6959 //9251//11545 LP (E3) 1902 (28-07-98) USB id 71416 (DR)
6959 //9251//11545 LP (E3) 1906 (20-08-98) USB id 30394 (DR)
6959 //9251//11545 LP (E3) 1907 (02-08-98) USB id 44340 (DR)
6959 //9251//11545 LP (E3) 1928 (04-08-98) USB In progress (DR)
6959 //9251//11545 LP (E3) 2000 (03-08-98) USB id 44340 (DR)
6959 //9251//11545 LP (E3) 2000 (17-08-98) USB id 30394 (DR)
6959 //9251//11545 LP (E3) 2000 (21-08-98) USB id 30394 (DR)
6959 //9251//11545 LP (E3) 2000 (22-07-98) USB 71416 callup (DR)
6959 //9251//11545 LP (E3) 2000 (23-07-98) USB 61235 callup (DR)
6959 //9251//11545 LP (E3) 2000 (26-07-98) USB id 26079 (DR)
6959 //9251//11545 LP (E3) 2000 (27-07-98) USB id 71416 (DR)
6959 //9251//11545 LP (E3) 2001 (06-08-98) USB id 47178 (DR)
6959 //9251//11545 LP (E3) 2004 (02-08-98) USB id 84176 (DR)
6959 //9251//11545 LP (E3) 2005 (16-08-98) USB id 09807 (DR)
6959 //9251//11545 LP (E3) 2007 (20-08-98) USB id 10118 (DR)
6959 //9251//11545 LP (E3) 2009 (24-07-98) USB 71416 callup (DR)
6959 //9251//11545 LP (E3) 2009 (29-07-98) USB id 71416 (DR)
6959 //9251//11545 LP (E3) 2035 (31-07-98) USB In progress (DR)
6959 //9251//11545 LP (E3) 2100 (22-08-98) USB id 30394 (DR)
6959 //9251//11545 LP (E3) 2100 (25-07-98) USB 71416 callup (DR)
6959 //9251//11545 LP (E3) 2100 (27-07-98) USB id 26079 (DR)
6959 //9251//11545 LP (E3) 2102 (17-08-98) USB id 097807 (DR)
6959 //9251//11545 LP (E3) 2102 (31-07-98) USB id 61235 (DR)
6959 //9251//11545 LP (E3) 2106 (07-08-98) USB id 47178 (DR)
6959 //9251//11545 LP (E3) 2107 (24-07-98) USB 61235 callup (DR)
6959 //9251//11545 LP (E3) 2108 (08-08-98) USB id 44340 (DR)

6959 //9251//11545 LP (E3) 2110 (01-08-98) USB In progress (DR)
6959 //9251//11545 LP (E3) 2200 (21-07-98) USB 26079 callup (DR)
6959 //9251//11545 LP (E3) 2200 (22-08-98) USB id 10118 (DR)
6959 //9251//11545 LP (E3) 2200 (25-07-98) USB 61235 callup (DR)
6959 //9251//11545 LP (E3) 2203 (28-07-98) USB id 26079 (DR)
6959 //9251//11545 LP (E3) 2206 (08-08-98) USB id 47178 (DR)
6959 //9251//11545 LP (E3) 2207 (01-08-98) USB id 47178 (DR)
6959 //9251//11545LP (E3) 2033 (07-08-98) USB In progress (DR)
6959 //9251//11545 LP (E3) 2209 (04-08-98) USB id 84176 (DR)
6959 LP (E3) 1900 USB ID: 44340, // 9251, 11545 [JRU]
6980 V2 14/aug AM YL/SS/5FG UNID at 02:05 with Atencion Atencion 35049
35049 35049 35049 then at 02:34 44912 44912 44912 ended
xmsn at 02:47 with Final Final Final. (CC)
6982 M8 cut no's stn 1200 Jul 27/98 CW with DRTNN DRDTN IDUID (BR)
6983 M8 Weds 19/8/98 0700 15262 69283 86703 (GD2)
6983 V2/SS/YL/5FG/0200UTC/31July/Short pause in the middle of the
transmission, ended at 0244UTC with three "finals". (JL)
6983 V2 "Atencion". 0200UTC, 14/August. 5 FG. End with three "final"
at 0245UTC. (JL)
6985 M8 Weds 5/8/98 0700 30372 71311 87681 (GD2)
6999 M23 Frid 21/8/98 1000 00000 R3 = 37 37 = (GD2)
6999 M23 Thurs 20/8/98 1000 00000 R3 = 28 28 = (GD2)
6999 M23 Tues 18/8/98 1000 00000 R3 = 26 26 = (GD2)
6999 M23 Weds 19/8/98 1000 00000 R3 = 28 28 = (GD2)
7256 M3 numbers station, 16.30 (July 28) CW 287/00 == 000 (AB)
7256 M3 Frid 21/8/98 1630 287/00 (GD2)
7256 M3 Frid 7/8/98 1630 287/00 (GD2)
7256 M3 Mon 17/8/98 1630 287/00 (GD2)
7256 M3 Mon 3/8/98 1630 287/00 (GD2)
7256 M3 Sat 22/8/98 1630 287/00 (GD2)
7256 M3 Sat 8/8/98 1630 287/00 (GD2)
7256 M3 Sun 16/8/98 1630 287/00 (GD2)
7256 M3 Sun 2/8/98 1630 287/00 (GD2)
7256 M3 Thurs 20/8/98 1630 287/00 (GD2)
7256 M3 Thurs 6/8/98 1630 287/00 (GD2)
7256 M3 Tues 18/8/98 1630 287/00 (GD2)
7256 M3 Tues 4/8/98 1630 287/00 (GD2)
7256 M3 Weds 19/8/98 1630 287/00 (GD2)
7256 M3 Weds 5/8/98 1625 VVV = = 000. Test Call (GD2)
7256 M3 Weds 5/8/98 1630 287/00 (GD2)
7322 Mossad (E10) Wed 29.07.98 1930 ULX, msg, gr 29 (HFD)
7337 //9251//12603 LP (E3) 1800 (17-08-98) USB id 88509 (DR)
7337 //9251//12603 LP (E3) 1801 (03-08-98) USB id 73233 (DR)
7337 //9251//12603 LP (E3) 1801 (16-08-98) USB id 00180 (DR)
7337 //9251//12603 LP (E3) 1803 (26-07-98) USB id 28290 (DR)
7337 //9251//12603 LP (E3) 1805 (02-08-98) USB id 41014 (DR)
7337 //9251//12603 LP (E3) 1805 (27-07-98) USB id 47658 (DR)
7337 //9251//12603 LP (E3) 1900 (17-08-98) USB id 00180 (DR)

7337 //9251//12603 LP (E3) 1905 (27-07-98) USB id 28290 (DR)
7337 //9251//12603 LP (E3) 1906 (03-08-98) USB id 41014 (DR)
7337 //9251//12603 LP (E3) 2000 (28-07-98) USB id 47658 (DR)
7337 //9251//12603 LP (E3) 2002 (04-08-98) USB id 73233 (DR)
7337 //9251//12603 LP (E3) 2030 (21-07-98) USB In progress (DR)
7337 //9251//12603 LP (E3) 2100 (21-07-98) USB 28290 callup (DR)
7337 //9251//12603 LP (E3) 2100 (22-07-98) USB 47658 callup (DR)
7337 //9251//12603 LP (E3) 2102 (04-08-98) USB id 41014 (DR)
7337 //9251//12603 LP (E3) 2102 (28-07-98) USB id 28290 (DR)
7337 //9251//12603 LP (E3) 2106 (29-07-98) USB id 47658 (DR)
7337 //9251//12603 LP (E3) 2108 (19-08-98) USB id 88509 (DR)
7337 //9251//12603 LP (E3) 2200 (20-08-98) USB id 88509 (DR)
7337 //9251//12603 LP (E3) 2203 (05-08-98) USB id 41014 (DR)
7337 //9251//12603 LP (E3) 2203 (22-07-98) USB 28290 callup (DR)
7337 //9251//12603 LP (E3) 2203 (23-07-98) USB 47658 callup (DR)
7337 //9251//12603 LP (E3) 2203 (29-07-98) USB id 28290 (DR)
7337 //9251//12603 LP (E3) 2204 (06-08-98) USB id 73233 (DR)
7337 //9251//12603 LP (E3) 2205 (19-08-98) USB id 00180 (DR)
7425 M17 Weds 5/8/98 0800 53263 25 (GD2)
7482 SPANISH LADY (V2) 0444Z (02.07.98) AM in progress (SD)
7499 Cherry Ripe (E4) 2305 (09-08-98) USB id 70365 (DR)
7529 Russian Man, RUS 5.00 (Aug 6) AM 549 549 549 1 (R5) 248 72 248 72
5FG 000 000 (AB)
7529 RUSSIAN MAN (S7) 0500Z (06.08.98) AM callup 549 549 549 1 id 248
72 heavily QRMd by VLT School of Distance Education, Charters
Towers on 7530 USB (SD)
7540 MOSSAD (E10) 1603 AM 2/aug JSR, msg. [JRU]
7555 V2 0300 Sunday 7/19/98 Atencion YL/SS rptg "A 38049 53232 20562"
and into 5FG. (JM4)
7555 V2 0300 Sunday 8/16/98 Atencion YL/SS rptg "A 05901 82153 59803"
and into 5FG. JM4
7580 M8 Thurs 6/8/98 1000 61012 83762 28432 (GD2)
7583 V2 "Atencion" station. 0226UTC, 05 August. In progress, 5FG.
Ended at 0244UTC with three "final". Carrier off at 0258UTC. (JL)
7640 E6 0400 Saturday 7/18/98 The English Man/E6 (hermaphrodite voice)
OM/YL/EE rptg "534" until 0404, then "820 820 67 67" and into 67
5FGx2. Down at :16 w/"820 820 67 67 00000". Most likely will
repeat this broadcast tonight. Usual +60db signal.(JM4)
7640 E6 0400 Sunday 7/19/98 The English Man/E6 (hermaphrodite voice)
OM/YL/EE rptg "534"w/repeat of prior nights broadcast. Was up at
0347 w/test tones and tape test. +60db again.(JM4)
7648 M3 Tues 18/8/98 1200 741/00 (GD2)
7649 M3 Tues 4/8/98 1200 741/00 (GD2)
7657 M12 Mon 17/8/98 1620 749x3 1 R8 6073 147 6073 147 (GD2)
7657 M12 Mon 3/8/98 1620 749x3 1 4028 141 4028 141 (GD2)
7680 M8 Sat 22/8/98 0800 02093 58132 65812 (GD2)
7680 M8 Sat 8/8/98 0800 97081 12033 75873 (GD2)
7680 M8 CW 0400 Tuesday Aug 11 Cut # stn, very loud, callups UDIGN

NTNAD AMMAN," signed "AR AR AR SK SK SK" at 0436. (HS)

7726 V2 0500 Wednesday 8/12/98 Atencion YL/SS 5FG in progress. JM4

7734 V2 0400 Friday 7/17/98 Atencion (old version) YL/SS rptg "A _8_02" then "02 89" and into 5FG. Two final, then "584 02" and "02 49" and into 5FG. Down w/two final. Had a "General Quarters" type siren on for over an hour prior to broadcast, which quit upon tape being played at 0300. (JM4)

7734 V2 0400 Friday 8/7/98 Atencion (old version) YL/SS rptg "A 584 03" and "03 51" into 5FG. JM4

7734 Atencion stn V2 08/07/98 0400Z - single 3/2 group preamble with much distortion and lots of hum (BR)

7755 //10426 LP (E3) 1520 (21-07-98) USB In progress (DR)

7755 //8464//10426 LP (E3) 1405 (28-07-98) USB id 82534 (DR)

7755 //8464//10426 LP (E3) 1500 (18-08-98) USB id 73110 (DR)

7755 //8464//10426 LP (E3) 1505 (04-08-98) USB id 04242 (DR)

7786 Spanish lady (V2) 2312 (6-8-98) SS/YL 5FG in progress. Ends with = two "Final" at 2315 (VM)

7795 M23 Frid 21/8/98 0930 284 R3 = 68 68 = (GD2)

7795 M23 Frid 21/8/98 1500 246 R4 = 57 57 = (GD2)

7795 M23 Mon 17/8/98 1500 484 R3 = 63 63 = Repeat of 29/4 6/5 13/5 20/5 27/5 10/6 19/6 1/7 14/7 22/7 29/7 (GD2)

7795 M23 Mon 3/8/98 1500 284 R5 = 68 68 =. New message to new ID (GD2)

7795 M23 Thurs 20/8/98 0930 884 R4 = 70 70 = # (GD2)

7795 M23 Thurs 20/8/98 1500 486 R3 = 54 54 = Repeat # 12 (GD2)

7795 M23 Thurs 6/8/98 1500 884 R3 New ID = 70 70 = New message (GD2)

7795 M23 Tues 18/8/98 0930 228 R4 = 47 47 = (GD2)

7795 M23 Tues 18/8/98 1500 264 R2 = 59 59 = (GD2)

7795 M23 Tues 4/8/98 1500 264 R3 = 59 59 =. Repeat (GD2)

7795 M23 Weds 19/8/98 0930 428 R4 = 70 70 = (GD2)

7795 M23 Weds 19/8/98 1500 664 R3 = 60 60 = (GD2)

7795 M23 Weds 5/8/98 1500 428 R3. New ID = 70 70 = Starting new message (GD2)

7840 Fife Free (E18) 2151 (12-8-98) USB YL/EE 5 FG in progress repeating broadcast of 21:00. Ended at 22:09 (VM)

7840 Fife Free (E18) 2145 (13-8-98) Same message as sent on previous day (VM)

7846 M8 cut no's stn) 1100 Jul 15/98 CW (BR)

7858 Two-letter German (G16) 2140 (13-8-98) USB YL/GG 3/2 FG in progress (VM)

7887 V2 "Atencion". 0200UTC, 09/August. Faded beyond readability shortly after start of transmission. (JL)

7887 V2 0200 Sunday 8/9/98 Atencion YL/SS rptg "A 38049 82152 59802" and into 5FG. JM4

7887 V2 SS/YL/5FG 0204UTC ended at 0246. Came in after beginning so I cant' give you the header, ended with three zeros though (sounds little like hello in spanish?) (JL)

7887.5 M8 CW 0100 Tuesday 7/28/98 ANDUWRIGMT 5F/L/G in progress. (JM4)

7918 Mossad 0200 Monday 8/10/98 YL/EE rptg "YHF" and into 5LG. JM4

7918 Mossad 0200 Saturday 7/18/98 YL/EE rptg "YHF" then into 5LG.(JM4)
7918 Mossad 0200 Saturday 8/15/98 YL/EE rptg "YHF" and into 5LG. JM4
7918 Mossad 0200 Saturday 8/8/98 YL/EE rptg "YHF" and into 5LG JM4
7918 Mossad 0200 Thursday 7/30/98 YL/EE rptg "YHF" then into 5LG. (JM4)
7918 Mossad 0200 Tuesday 7/14/98 YL/EE rptg "YHF" and into 5LG.(JM4)
7918 Mossad 0200 Tuesday 7/28/98 YL/EE rptg "YHF" then into 5LG (JM4)
7918 Mossad 0200 Tuesday 8/11/98 YL/EE rptg "YHF" then into 5LG. JM4
7918 Mossad 0200 Wednesday 7/29/98 YL/EE 5LG in progress. (JM4)
7918 Mossad 0200 Wednesday 8/12/98 YL/EE rptg "YHF" and into 5LG. JM4
7940 English Man (E6) 2205 (09-08-98) AM In progress ended 710 710 99
99 00000 (DR)
8025 Fife Free (E18) 2100 (12-8-98) USB YL/EE "307" (R5) then: "number
128 groups 60" and into 5 FG. Ended at 2124 with 000 (VM)
8063 Two-letter German (G16) 2139 (10-8-98) YL/GG 3/2FG in progress.
"Ende" at 21:44 (VM)
8065.5 M8 CW 0500 Wednesday 8/12/98 ANDUWRIGMT 5F/L/G JM4
8067 M8 cut no's stn 1100 Jul 15/98 CW (BR)
8087 M8 Mon 3/8/98 1000 33171 58692 99023 (GD2)
8116 M12 Weds 19/8/98 2100 521x3 1 837 61 837 61 (GD2)
8116 M12 Weds 5/8/98 2100 521x3 1 6137 139 6137 139 (GD2)
8122 Counting Station (E5) (29-09-98) AM id 103 strong signal (DR)
8122 Counting Station (E5) 2207 (29-09-98) AM id 103 strong signal (DR)
8124 Mossad (E10a) 1848 (23-07-98) AM Charlie India Oscar 2 callup (DR)
8125 //10423 Counting Station 2201 (19-08-98) USB id 103 count 122 (DR)
8125 //10423 Counting Station 2205 (16-08-98) USB id 103 count 122 (DR)
8126 RUSSIAN MAN (S7) 0500Z (30.06.98) callup 138 138 138 1 id 248 72
(SD)
8127 Mossad 0150, USB, CI02 (Marker - Female - EE - OTA 0150Z Wed)(JP)
8166 S07 Russian Man ends "000 000" 131 131 131 1 Thu 30.07.98 0500
(HFD)
8166 RUSSIAN MAN (S7) 0500Z (14.07.98) AM callup 131 131 131 1 id 248
72 (SD)
8167 Russian Man (S7), RUS 5.00 (July 30) AM 131 131 131 1 248 72 248
72 5FG 000 000 (AB)
8188 Swedish Rhapsody (E23) 1159 (20-08-98) USB preamble then into
message (DR)
8188 Swedish Rhapsody 1157 (03-08-98) USB Strong signal (DR)
8191 M10 numbers stations, 18.10 (July 26) CW 555 661 38 423 22 (AB)
8191 M10 Sat 22/8/98 0710 555x3 661x3 26 423x3 18 (GD2)
8191 M10 Sat 8/8/98 0710 555x3 661x3 32 423x3 50 (GD2)
8191 M10 Sun 2/8/98 1810 555x3 661x3 34 423x3 46 (GD2)
8191 M10 Thurs 6/8/98 1810 555x3 661x3 32 423x3 50 (GD2)
8231 M53 Mon 17/8/98 2000 CQ 747.338. HR?? (GD2)
8231 M53 Mon 3/8/98 2000 CQ 747.835 HR 28 (GD2)
8231 M53 Sun 2/8/98 2000 CQ 747.835 HR 28 (GD2)
8231 M53 Thurs 20/8/98 2000 CQ 747.466 (GD2)
8231 M53 Tues 18/8/98 2000 CQ 747.428 HR 36 (GD2)
8231 M53 Tues 4/8/98 2000 CQ 747.759 HR 20 (GD2)

8231 M53 Weds 19/8/98 2000 CQ 747.466 (GD2)
8231 M53 Weds 5/8/98 2000 CQ 747.759 HR 20 (GD2)
8300 V13 1300 Monday 8/17/98 New Star Broadcasting YL/CC 4FGx2. JM4
8307 M23 Mon 17/8/98 0800 579 R10 // 9285. Repeat rest of Week (GD2)
8307 M23 Sun 2/8/98 0800 579 R10 // 9285 (GD2)
8307 M23 Sun 2/8/98 1400 579 R10 // 9285 (GD2)
8375 V13 1300 Monday 8/17/98 New Star Broadcasting YL/CC 4FGx2. JM4
8464 //10426//1154 LP (E3) 1600 (16-08-98) USB id 77350 (DR)
8464 //10426//11545 LP (E3) 1600 (26-07-98) USB id 99843 (DR)
8464 //10462//11545 LP (E3) 1606 (02-08-98) USB id 41836 (DR)
8464 //12603//14487 LP (E3) 1600 (06-08-98) USB id 94454 (DR)
8464 //12603//14487 LP (E3) 1600 (23-07-98) USB 75506 callup (DR)
8464 //12603//14487 LP (E3) 1603 (20-08-98) USB id 66269 (DR)
8464 //12603//14487 LP (E3) 1605 (30-07-98) USB id 75506 (DR)
9130 Mossad (E10) 2100 (28-07-98) USB id EZI (DR)
9130 Mossad (E10) 2100 (31-07-98) USB id EZI (DR)
9130 Mossad (E10) 2101 (29-09-98) AM id EZI (DR)
9130 Mossad (E10) 2131 (27-07-98) USB id EZI (DR)
9130 Mossad (E10) 2134 (25-07-98) In progress (DR)
9130 MOSSAD (E10) 1619 AM 2/aug ongoing msg, msg ends, at 1625 a male voice transmitted ca. 10 chars, then the female mossad-voice was up and repeated EZI2 two times, tx remained on and at 1627 EZI2 was repeated 35 times. [JRU]
9130 MOSSAD (E10) 1730 AM 2/aug EZI, // 6840, msg, groups 59, text. starts with wpmp ovcp wglzg ... [JRU]
9130 MOSSAD (E10) 1904 AM 2/aug EZI, msg, groups 31, starts RSYZE BVVFE RNDUZ ... [JRU]
9153 V2 0500 Wednesday 8/12/98 Atencion/V2 YL/SS rptg "A 32313 83202 50882" and into 5FG. JM4
9154 M8 CW 0500 Tuesday Aug 11 Cut # stn, same msgs as 0400. (HS)
9226 XPH - Polytone station, 06.00 (Aug 12) TONES (AB)
9226 HIGH PITCHED POLYTONE (XPH) 0600Z (05.08.98) AM (SD)
9238 V2 0600 Wednesday 8/12/98 Atencion YL/SS rptg "A 32313 83202 50882" and into 5FG. JM4
9238 SPANISH LADY (V2) 0600Z (01.07.98) AM in progress (SD)
9241 M13 Mon 3/8/98 1900 261 R5 = 199 20 = (GD2)
9241 M13 Mon 3/8/98 2000 261 R5 = 199 20 = (GD2)
9251 LP, CYP 22.00 (Aug 12) USB Id 41014 (AB)
9251 LP (E3) 1800 USB 2/aug ID: 41014, // 7337 [JRU]
9260 V2 "Atencion". 0159UTC, 12/August. 5FG, started early. 0206UTC, two "final", "atencion", briefly into 3/2 FG, then into 5FG. This entire trasmission was in a very fast pace. Two "final" at 0212UTC.(JL)
9260 V2 0200 Wednesday 8/12/98 Atencion (old version) YL/SS rptg "A 61602" then "02 45" and into 5FG. Two final, then "616 02" and "02 45" and into 5FG. Down at :12 w/two final. JM4
9260 V2 0200 Wednesday 8/5/98 Atencion (old version) YL/SS rptg "A 61606" and "06 56" and into 5FG. Down at :09 w/no final. JM4

9260 V2 "Atencion" station. 0200UTC, 05 August. "Older woman" voice giving 5FG. I left the freq. to scan the bands, came back at 0213UTC and signal was gone, but carrier still present: carrier off at 0249UTC. (JL)

9260 616, unknown, 0205, AM, Atencion 616 01 (Cont'd) (Female - SS - Into 5 fig tfc at 0205Z - Wed)(JP)

9262 //12056//16624 Cherry Ripe (E4) (27-07-98) USB id 61902 (DR)

9262 //12056//16624 Cherry Ripe (E4) 2200 (27-07-98) USB id 61902 (DR)

9263 //12056 Cherry Ripe (E4) 2200 (23-07-98) USB 25514 callup (DR)

9263 CHERRY RIPE (E4) 1119Z (13.07.98) USB very weak and in progress (SD)

9272 M3 Sat 22/8/98 0800 624/00 (GD2)

9272 M3 Sat 8/8/98 0800 624/00 (GD2)

9272 M3 Tues 18/8/98 0730 182/00 (GD2)

9285 Backward Music station, 22.54 (July 18) weak signal (AB)

9285 Backwards Music Station/XM 0300 Friday 7/17/98 (JM4)

9285 Backwards Music Station/XMU 0300 Saturday (JM4)

9325 Two letter station (G16) 2050 (5-8-98) GG/YL in progress (VM)

9326 RUSSIAN MAN (S7) 0520Z (30.06.98) AM callup 138 138 138 1 id 248 72 (SD)

9366 RUSSIAN MAN (S7) 0520Z (02.07.98) AM callup 131 131 131 1 id 248 72 (SD) RUSSIAN MAN (S7) 0520Z (14.07.98) AM callup 131 131 131 1 id 248 72 (SD)

9367 Russian Man (S7), RUS 5.20 (July 30) AM Repeat of 0500 transmission (AB)

9427 419 419 419 1, 9429 RUSSIAN MAN (S7) 0520Z (04.08.98) AM callup 549 549 549 1 id 248 72 (SD)

9429 Russian Man, RUS 5.20 (Aug 6) AM 549 549 549 1 (R5) 248 72 248 72 5FG 000 000 (AB)

9441 XPH Polytone station, 6.00 (July 29) TONES (AB)

9441 XPH Polytone station, 06.00 (July 24) TONES null message (AB)

9441 HIGH PITCHED POLYTONE (XPH) 0600Z (15.07.98) AM (SD)

9454 M10 Frid 7/8/98 1710 Call missed. 17 17 20 20 = = (GD2)

9916 XPH -Polytone station, 20.40 (Aug 11) TONES (AB)

9950 M3 Tues 18/8/98 1300 183/00 (GD2)g

9950 M3 Tues 4/8/98 1300 183/00 (GD2)

10125 V6 0400Z-0420Z, and on 10125 USB v6/0430Z-????Z. I did not get the ending time because of a large increase in noise. The station was very weak the entire time. Possibly a cuban station, but not sure-antenna faces East/West. (MW)

10211 Unid CW 0300 Saturday 7/18/98 rapid CW 5FG w/long zeros. Down at :24 w/5 long zeros. M?? (JM4)

10223 E5 Cynthia. 1200UTC, 05 August. 3/2FG. 1152UTC, tone begins then stops. Preamble: 415 Count: 215. End at 1250UTC. (JL)

10223 E5 YL/EE/3-2FG/1218UTC/29July/AM/in progress, and very weak. (JL)

10223 E5/EE/YL/3-2FG/1213UTC/01August/The typical beeps before transmission in progress at 1152UTC and continued PAST the hour. Actual message in progress at 1213UTC. Preamble: 415 Count: 215.

1256UTC, "end". (JL)

10223 Counting stn (E5) 1200 Jul 15/98 AM (BR)

10223 Counting stn (E5) 1200 Jul 22/98 AM with msg 690 count 215 same as Jul 1 & 8 (BR)

10223 E5 Cynthia. 1203UTC, 12/August. Started late? Preamble: 343 Count: 215 3/2 FG. "End" at 1250UTC. (JL)

10223 //13518 AM 1200 Saturday 8/15/98 TCS/E5 YL/EE rptg "343" w/1-0 count. At 1210, "Count 215" and into 3/2FG. Note new //. JM4

10227 German Lady (G7) 1801 (21-08-98) AM id 213 (DR)

10248 8BY, unknown, 2052, cw, vvv 8BY 097/629/532/476 //12075 and 14931(JP)

10328 BPA (FAPSI) M42 08/03/98 1522Z RTTY 425/75 with 1/41 msg (BR)

10371 M13 Tues 4/8/98 2000 517 R5 = 172 26 = (GD2)

10408 M12 Tues 18/8/98 2100 427x3 000 (GD2)

10423 //12197 Counting Station (E5) 2001 (17-08-98) USB id 642 count 41 (DR)

10423 Counting Station (E5) 2000 (20-08-98) USB id 895 count 205 (DR)

10423 Counting Station (E5) 2004 (06-08-98) USB id 642 (DR)

10423 Counting station (E5) 2203 (9-8-98) id 103(VM)

10426 //11545//14487 LP (E3) 1408 (22-08-98) USB id 77350 (DR)

10426 //12603//14487 LP (E3) 1400 (27-07-98) USB id 82534 (DR)

10426 //12603//14487 LP (E3) 1404 (17-08-98) USB id 73110 (DR)

10426 HIGH PITCHED POLYTONE (XPH) 0620Z (05.08.98) AM (SD)

10452 CHERRY RIPE (E4) 1000Z (13.07.98) USB very weak simulcast on 15624 //17499 (SD)

10500 G16 0400 Sunday 7/19/98 Two-Letter German YL/GG rptg "Whiskey Lima" w/electronic tune. At 0405, "Messages for 522; 522 83 gruppen... Achtung!" and into 3/2FGx2. Down at :16 w/ "ende". (JM4)

10527 //12197 Counting Station 2001 (16-08-98) USB id 908 count 75 (DR)

10527 Counting Station (E5) 2002 (21-08-98) USB id 508 count 185 (DR)

10529 E5 Cynthia. 1300UTC, 06 August. Continuous tone begins at 1246UTC and at 1247UTC, turns into the beeps. Very weak signal, could not distinguish either preamble or count.(JL)

10529 E5 Cynthia. 1300UTC, 11/August. No pre-beeps/tones. Preamble: 973 Count: 215 3/2 FG. (JL)

10529 E5/EE/YL/1300UTC/31July/"beeps" in progress at 1250UTC until beginning of trasmission. Preamble: 319 Count: 215.(JL)

10529 E5 Cynthia. 1300UTC, 04 August. Light QRM. Only four beeps at 1253UTC before the beginning of the transmission. Preamble: 973 Count: 215. I was not present for the end. (JL)

10529 E5 Cynthia. 1300UTC, 14/August. Beeps at 1219UTC in progress. Preamble: 973 Count: 215 3/2 FG. (JL)

10529 TCS (E5) 1300 usb 319 319 1234567890 count 215 3/2ngs.(CT)

10583 Counting Station (E5) 2102 (08-08-98) USB id 042 count 194 (DR)

10583 Counting station (E5) 2105 (11-8-98) id 042 (VM)

10597 Counting Station (E5) 1500 (21-08-98) USB id 851 count 196 (DR)

10597 Counting Station (E5) 1505 (18-08-98) USB id 851 count 196 (DR)

10597 counting stn E5 08/04/98 1500Z with msg 376. (BR)
10624 Cherry Ripe (E4) 2202 (03-08-98) USB id 70365? (DR)
10624 Cherry Ripe (E4) 2202 (03-08-98) USB id 70365? (DR)
10648 Mossad (E10) 1800 (16-08-98) AM id YHF (DR)
10648 Mossad (E10) 1801 (19-08-98) AM id YHF group 91 (DR)
10649 Polytone station (XPH) 1702 (19-08-98) AM In progress (DR)
10715 V5/SS/YL/3-2FG/0300UTC/31July/Another short pause in the middle
of transmission (same message as 6983?).(JL)
10715 V2 0300 Friday 8/7/98 Atencion YL/SS 5FG in progress. Note new
time. JM4
10715 Atencion stn V2 08/07/98 0300Z - three 5-FIG group preamble (BR)
10720 M3 Tues 18/8/98 0900 503/00 (GD2)
10727 Russian man (E7) 2014 (12-8-98) OM/EE Null message format: 174174
174 000". Ended at 2016 (VM)
10826 RUSSIAN MAN (S7) 0540Z (30.06.98) AM 138 138 138 1 id 248 72 (SD)
10857 M8 Tues 18/8/98 1200 55191 07562 07531 (GD2)
10858 M8 cut no's stn 1200 Jul 23/98 CW (BR)
10858 M8 cut no's stn 08/04/98 1200Z CW (BR)
10858 M8 cut no;s stn 1200 Jul 16/98 CW (BR)
10921 M10 Sun 2/8/98 1920 555x3 481x3 45 988x3 46 (GD2)
10922 M10 Sun 16/8/98 1920 555x3 481x3 39 988x3 15 (GD2)
10929 Russian Man, RUS 5.40 (Aug 6) AM 549 549 549 1 (R5) 248 72 248 72
5FG 000 000 (AB)
10929 RUSSIAN MAN (S7) 0540Z (04.08.98) AM 549 549 549 1 id 248 72 (SD)
10975 LP (E3) 2125 (10-8-98) YL/EE 5FG in progress (VM)
10977 Counting Station (E5) 2102 (03-08-98) AM id 370 (DR)
11041 XPH Polytone station, 06.20 (July 29) TONES (AB)
11041 XPH Polytone station, 06.20 (July 10) TONES Long message, ca 5
mins. Very loud signal (AB)
11041 HIGH PITCHED POLYTONE (XPH) 0620Z (01.07.98) AM with new callup
tones (SD)
11041 HIGH PITCHED POLYTONE (XPH) 0620Z (15.07.98) AM (SD)
11070 Counting Station (E5) 1803 (08-08-98) AM id 035 (DR)
11072 //13444 Counting Station (E5) 1802 (17-08-98) id 035 count 136
(DR)
11072 //13444 Counting Station (E5) 1805 (22-08-98) id 035 count 136
(DR)
11147 SPANISH MAN (V7) 0600Z (30.06.98) AM callup 118 118 118 000 null
message (SD)
11150 English Man (E6) 2103 (09-08-98) AM id 835 key 710 GC 99 (DR)
11150 English Man (E6) 2104 (08-08-98) AM In progress ended 2121 (DR)
11150 Russian man (E6) 2101 (9-8-98) EE/OM Repeat of 8-8-98 broadcast.
Id 835 (VM)
11166 RUSSIAN MAN (S7) 0540Z (14.07.98) AM callup 131 131 131 1 id 248
72 (SD)
11167 Russian Man (S7), RUS 5.40 (July 28) AM 131 131 131 1 + 5FG 000
000 (AB)
11270 Russian Man 'control' (S25) 0820 (17-08-98) AM id 615 (DR)

11416 M8 Thurs 20/8/98 1100 555x3 866x3 25 844x3 30 (GD2)
11416 XPH - Polytone station, 20.20 (Aug 11) TONES (AB)
11430 V13 1300 Monday 8/17/98 New Star Broadcasting YL/CC 4FGx2. JM4
11430 V13 1300 Sunday 8/16/98 New Star Broadcasting YL/CC 4FGx2 JM4
11440 The Counting Station (TCS) (E5) 2200Z (24-07-98) id 323 (VM)
11445 M13 Sun 2/8/98 2000 261 R5 = 199 20 = (GD2)
11450 Russian Man (S7) 2004 (17-08-98) AM id 742 null message format
(DR)
11464 Six tones polytone station (X6) 0646 (10-8-98)(VM) (=FAPSI -Ary-)
11487 //15682 LP (E3) 1309 (02-08-98) USB id inaudible (DR)
11491 //13450 Counting Station (E5) 1900 (22-08-98) id 200 count 74 (DR)
11491 //13450 Counting Station (E5) 1906 (19-08-98) id 200 count 74 (DR)
11545 //12603//13375 LP (E3) 1500 (21-08-98) USB id 00180 (DR)
11545 //12603//13375 LP (E3) 1500 (23-07-98) USB 26079 callup (DR)
11545 //12603//13375 LP (E3) 1500 (24-07-98) USB 28290 callup (DR)
11545 //12603//13375 LP (E3) 1500 (26-07-98) USB id 61235 (DR)
11545 //12603//13375 LP (E3) 1501 (16-08-98) USB id 10118 (DR)
11545 //12603//13375 LP (E3) 1502 (20-08-98) USB id 09807 (DR)
11545 //12603//13375 LP (E3) 1502 (22-08-98) USB id 88509 (DR)
11545 //12603//13375 LP (E3) 1503 (07-08-98) USB id 41014 (DR)
11545 //12603//13375 LP (E3) 1505 (02-08-98) USB id 47178 (DR)
11545 //12603//13375 LP (E3) 1505 (31-07-98) USB id 28290 (DR)
11545 //12603//13375 LP (E3) 1538 (06-08-98) USB In progress (DR)
11545 //12603//13375 LP (E3) 1600 (24-07-98) USB 26079 callup (DR)
11545 //12603//13375 LP (E3) 1600 (25-07-98) USB 28290 callup (DR)
11545 //12603//13375 LP (E3) 1600 (31-07-98) USB id 26079 (DR)
11545 //12603//13375 LP (E3) 1602 (07-08-98) USB id 10881 (DR)
11545 //12603//13375 LP (E3) 1603 (21-08-98) USB id 09807 (DR)
11545 //12603//13375 LP (E3) 1605 (22-08-98) USB id 00180 (DR)
11545 //12603//13375 LP (E3) 1606 (08-08-98) USB id 41014 (DR)
11545 //12603//13375 LP (E3) 1607 (03-08-98) USB id 47178 (DR)
11545 //12603//13375 LP (E3) 1609 (01-08-98) USB id 41014 (DR)
11545 //12603//13375 LP (E3) 1700 (02-08-98) USB id 73233 (DR)
11545 //12603//13375 LP (E3) 1700 (25-07-98) USB 26079 callup (DR)
11545 //12603//13375 LP (E3) 1700 (26-07-98) USB id 47658 (DR)
11545 //12603//13375 LP (E3) 1700 (28-07-98) USB id 61235 (DR)
11545 //12603//13375 LP (E3) 1706 (01-08-98) USB id 84176 (DR)
11545 //12603//13375 LP (E3) 1707 (04-08-98) USB id 47178 (DR)
11545 //12603//13375 LP (E3) 1707 (16-08-98) USB id 88509 (DR)
11545 //12603//13375 LP (E3) 1708 (22-08-98) USB id 09807 (DR)
11545 //12603//13375 LP (E3) 1725 (08-08-98) USB In progress (DR)
11545 //12603//14487 LP (E3) 1501 (30-07-98) USB id 26079 (DR)
11545 //13375 LP (E3) 1903 (24-07-98) USB 89125 callup (DR)
11545 //13375//15682 LP (E3) 1500 (27-07-98) USB id 89125 (DR)
11545 //13375//15682 LP (E3) 1501 (17-08-98) USB id 51114 (DR)
11545 //12603//13375 LP (E3) 1600 (17-08-98) USB id 10118 (DR)
11545 //13375//15682 LP (E3) 1600 (21-07-98) USB 89125 callup (DR)
11545 //13375//15682 LP (E3) 1600 (28-07-98) USB id 89125 (DR)

11545 //13375//15682 LP (E3) 1601 (04-08-98) USB id 10809 (DR)
 11545 //13375//15682 LP (E3) 1601 (18-08-98) USB id 51114 (DR)
 11545 //13375//15682 LP (E3) 1700 (21-07-98) USB 61235 callup (DR)
 11545 //13375//15682 LP (E3) 1906 (07-08-98) USB id 10809 (DR)
 11545 //13375//15682 LP (E3) 1906 (21-08-98) USB id 51114 (DR)
 11545 //13375//15682 LP (E3) 1907 (31-07-98) USB id 89125 (DR)
 11545 //13375//16084 LP (E3) 1700 (07-08-98) USB id 94454 (DR)
 11545 //13375//16084 LP (E3) 1700 (24-07-98) USB 75506 callup (DR)
 11545 //13375//16084 LP (E3) 1704 (21-08-98) USB id 66269 (DR)
 11545 //13375//16084 LP (E3) 1709 (31-07-98) USB id 75506 (DR)
 11545 //13375//16084 LP (E3) 1801 (22-08-98) USB id 66269 (DR)
 11545 //13375//16084 LP (E3) 1802 (01-08-98) USB id 94454 (DR)
 11545 //13375//16084 LP (E3) 1804 (25-07-98) USB 75506 callup (DR)
 11545 //13375//16084 LP (E3) 1807 (08-08-98) USB id 94454 (DR)
 11545 //14487//15682 LP (E3) 1400 (02-08-98) USB id 10809 (DR)
 11545 //14487//15682 LP (E3) 1402 (16-08-98) USB id 51114 (DR)
 11545 //14487//16084 LP (E3) 1500 (22-07-98) USB 7550? callup (DR)
 11545 //14487//16084 LP (E3) 1507 (19-08-98) USB id 66269 (DR)
 11545 //14487//16084 LP (E3) 1508 (29-07-98) USB id 75506 (DR)
 11545 //15682//16084 LP (E3) 1514 (05-08-98) USB In progress (DR)
 11545 LP (E3) 1604 USB ID: 41836, tx-problems during call-up, //10426, 8464 [JRU]
 11545 //13375//15682 LP (E3) 1506 (03-08-98) USB id 10809 (DR)
 11545 //14487 USB 1400 Sunday 8/16/98 LP/E3 extremely weak. JM4
 11565 Spanish Lady (V2) 1030 (17-08-98) AM In progress (DR)
 11570 Cherry Ripe (E4) 1300 (27-07-98) USB Header inaudible (DR)
 11570 Cherry Ripe (E4) 1301 (24-07-98) USB Header inaudible (DR)
 12056 // 13866 e4 1300utc usb 34448 5ngs 61260.(CT)
 12075 8BY, 2050, cw, vvv 8BY 097/629/532/476 //10248 and 14931 (JP)
 12125 unid 1526z F1 Baudot 500Hz FAPSI in progress, 11177 70037 65392 22875 04349 and after off air (IE)
 12126 HIGH PITCHED POLYTONE (XPH) 0640Z (05.08.98) AM (SD)
 12132 M12 Frid 7/8/98 1600 963x3 1 3681 142 3681 142 (GD2)
 12141 XPH Polytone station, 6.40 (July 29) TONES (AB)
 12141 HIGH PITCHED POLYTONE (XPH) 0640Z (01.07.98) AM as above (SD)
 12141 HIGH PITCHED POLYTONE (XPH) 0640Z (15.07.98) AM (SD)
 12141 XPH Polytone station, 06.40 (July 10) TONES Long message, ca 5 mins. Very loud signal (AB)
 12150 Counting Station (E5) 2100 (19-08-98) USB id 169 count missed (DR)
 12150 Counting Station (E5) 2101 (16-08-98) USB id 169 count 174 (DR)
 12175 Counting Station (E5) 2105 (22-08-98) USB id 042 count 194 (DR)
 12300 V5/SS/YL/3-2FG/0300UTC/01August/High pitched tone on and off for long durations in progress at 0230UTC until beginning of transmission. Signal fairly weak (RST33) as was //14421 . (JL)
 12300.5 NON 0159 Tuesday Aug 11 Carrier, became Counting Station (V5) at 0300. (HS)
 12300.5 R3E 0300 Tuesday Aug 11 Counting Stn (V5), joined in progress, weak //14421, ended "fin" at 0343. Yes, 12300.5 was the freq.(HS)

12300.5 //14421 AM 0300 Saturday 7/18/98 The Counting Station/V5 YL/SS
 rptg "697". At 0310 "Grupo 122" and into 3/2FG. (JM4)
 12300.5 //14421 AM 0300 Saturday 8/15/98 TCS/V5 YL/SS 3/2FG in progress.
 JM4
 12300.5 //14421 AM Saturday 8/8/98 TCS/V5 YL/SS rptg "097" w/1-0 count. At
 0310, "Grupo 203" and into 3/2FG. JM4
 12300 //14421 carriers only 08/08/98 0200Z - expected counting stn V5
 (BR)
 12300 //14421 counting stn V5 08/01/98 0200Z - carriers only (BR)
 12300 //14421 counting stn V5 08/08/98 0300Z with 097/203 msg (BR)
 12603 //14487 LP (E3) 1400 (04-08-98) USB id 94454 different freq to
 sked (DR)
 12603 //14487 LP (E3) 1400 (21-07-98) USB 75506 callup (DR)
 12603 //14487 LP (E3) 1400 (28-07-98) USB id 75506 (DR)
 12603 //14487 LP (E3) 1700 (22-07-98) USB 89125 callup (DR)
 12603 //14487 LP (E3) 1800 (23-07-98) USB 89125 callup (DR)
 12603 //14487//16314 LP (E3) 1404 (18-08-98) USB id 66269 (DR)
 12603 //14487//16475 LP (E3) 1700 (29-07-98) USB id 89125 (DR)
 12603 //14487//16475 LP (E3) 1706 (19-08-98) USB id 51114 (DR)
 12603 //14487//16475 LP (E3) 1735 (05-08-98) USB In progress (DR)
 12603 //14487//16475 LP (E3) 1801 (06-08-98) USB id 10809 (DR)
 12603 //14487//16475 LP (E3) 1805 (20-08-98) USB id 51114 (DR)
 13366 M12 Thurs 20/8/98 0630 957x3 000 (GD2)
 13366 M12 Thurs 6/8/98 0630 957x3 000 (GD2)
 13374 M8 cut no's stn 08/03/98 1800Z CW (BR)
 13375 LP 1500 Sunday 8/9/98 tune barely audible. JM4
 13416 XPH - Polytone station, 20.00 (Aug 11) TONES (AB)
 13450 //14448 Counting Station (E5) 1701 (17-08-98) id 476 count 103
 (DR)
 13450 //14448 Counting Station (E5) 1701 (20-08-98) id 476 count 103
 (DR)
 13450 //14448 Counting Station (E5) 1702 (16-08-98) id 954 count 139
 (DR)
 13450 //14448 Counting Station (E5) 1802 (19-08-98) id 523 count 99 (DR)
 13450 //14448 Counting Station (E5) 1902 (17-08-98) id 523 count 99 (DR)
 13452 JMS (FAPSI) M42 07/31/98 2241Z RTTY 425/75 with 2/358 msgs (BR)
 13452 JMS FAPSI RTTY (M42) Jul 24/98 425/75 with 3/447 msgs (BR)
 13518 Counting Station (E5) 1306 (22-08-98) USB id 973 count 215 (DR)
 13544 M12 Frid 21/8/98 1620 961x3 1 3429 143 3429 143 (GD2)
 13544 M12 Frid 7/8/98 1620 963x3 1 3681 142 3681 142 (GD2)
 13556 HZW FAPSI RTTY (M42) Jul 28/98 425/75 with 1/3 msg (BR)
 13564 V2 "Atencion". 0307UTC, 14/August. Extremely weak, not readable,
 only recognizable as V2. (JL)
 13906 E5 Cynthia. 1200UTC, 12/August. 1153UTC beeps, then tone for a
 few seconds at 1155UTC. Very weak signal. Preamble: 222 Count:
 215 3/2FG. 1230UTC repeated the count. "End" at 1250. (JL)
 13906 E5 YL/EE/3-2FG/1220UTC/29July/AM/in progress, good sig with minor
 fading and only very occasionally interrupted with a "buzz"(JL)

13906 counting stn (E5) 1200 Jul 15/98 AM (BR)
 13906 counting stn (E5) 1200 Jul 22/98 AM with msg 222 count 215 same
 as Jul 1 & 8 (BR)
 13906 E5 Cynthia. 1200UTC, 05 August. 3/2FG. Preamble: 222 Count: ???.
 Could not hear count do to noise, overall signal degraded by
 noise. End at 1250UTC. (JL)
 14421 V5 0300 Tuesday 8/11/98 Counting Station YL/SS 3/2FG in progress.
 Very weak. JM4
 14434 KRN FAPSI RTTY (M42) Jul 24/98 425/75 with 1/135 msg (BR)
 14448 Counting Station (E5) 1701 (21-08-98) USB id 954 count 139 (DR)
 14487 LP, CYP 12.00 (July 26) USB Id 47658. //15682 // 16084 kHz. All
 freqs heavily jammed by a pulse jammer (AB)
 14487 LP, CYP 14.00 (July 26) USB Id 89125. //15862 kHz (AB)
 14487 //15682 LP (E3) 1201 (21-08-98) USB id 88509 (DR)
 14487 //15682 LP (E3) 1222 (07-08-98) USB In progress (DR)
 14487 //15682 LP (E3) 1300 (07-08-98) USB id 44340 (DR)
 14487 //15682 LP (E3) 1300 (23-07-98) USB 71416 callup (DR)
 14487 //15682 LP (E3) 1302 (31-07-98) USB id 71416 (DR)
 14487 //15682 LP (E3) 1303 (08-08-98) USB id 44340 (DR)
 14487 //15682 LP (E3) 1340 (22-07-98) USB In progress (DR)
 14487 //15682 LP (E3) 1400 (07-08-98) USB id 73233 (DR)
 14487 //15682//16084 LP (E3) 1405 (03-08-98) id 04242 (DR)
 14487 //15682//16084 LP (E3) 1200 (21-07-98) USB 47658 callup (DR)
 14487 //15682//16084 LP (E3) 1200 (22-07-98) USB 47658 callup (DR)
 14487 //15682//16084 LP (E3) 1200 (23-07-98) USB 47658 callup (DR)
 14487 //15682//16084 LP (E3) 1200 (28-07-98) USB in progress (DR)
 14487 //15682//16084 LP (E3) 1201 (08-08-98) USB id 73233 (DR)
 14487 //15682//16084 LP (E3) 1202 (18-08-98) USB id 88509 (DR)
 14487 //15682//16084 LP (E3) 1202 (24-07-98) USB 47658 callup (DR)
 14487 //15682//16084 LP (E3) 1204 (03-08-98) USB id 73233? (DR)
 14487 //15682//16084 LP (E3) 1205 (25-07-98) USB 47658 callup (DR)
 14487 //15682//16084 LP (E3) 1205 (27-07-98) USB id 47658 (DR)
 14487 //15682//16084 LP (E3) 1206 (04-08-98) USB id 73233 (DR)
 14487 //15682//16084 LP (E3) 1206 (16-08-98) USB id 88507 (DR)
 14487 //15682//16084 LP (E3) 1207 (05-08-98) USB id 73233 (DR)
 14487 //15682//16084 LP (E3) 1207 (30-07-98) USB id 47658 (DR)
 14487 //15682//16084 LP (E3) 1219 (06-08-98) USB In progress (DR)
 14487 //15682//16084 LP (E3) 1223 (17-08-98) USB In progress (DR)
 14487 //15682//16084 LP (E3) 1300 (21-07-98) USB 71416 callup (DR)
 14487 //15682//16084 LP (E3) 1300 (21-08-98) USB id 30394 (DR)
 14487 //15682//16084 LP (E3) 1300 (28-07-98) USB in progress (DR)
 14487 //15682//16084 LP (E3) 1301 (03-08-98) USB id 44340 (DR)
 14487 //15682//16084 LP (E3) 1301 (16-08-98) USB id 30394 (DR)
 14487 //15682//16084 LP (E3) 1301 (30-07-98) USB id 71416 (DR)
 14487 //15682//16084 LP (E3) 1302 (17-08-98) USB id 30394 (DR)
 14487 //15682//16084 LP (E3) 1302 (18-08-98) USB id 30394 (DR)
 14487 //15682//16084 LP (E3) 1304 (04-08-98) USB id 44340 (DR)
 14487 //15682//16084 LP (E3) 1304 (24-07-98) USB 71416 callup (DR)

14487 //15682//16084 LP (E3) 1305 (27-07-98) USB id 71416 (DR)
14487 //15682//16084 LP (E3) 1306 (06-08-98) USB id 44340 (DR)
14487 //15682//16084 LP (E3) 1308 (22-08-98) USB id 30394 (DR)
14487 //15682//16084 LP (E3) 1326 (05-08-98) USB In progress (DR)
14487 //15682//16084 LP (E3) 1400 (22-07-98) USB 26079 callup (DR)
14487 //15682//16084 LP (E3) 1400 (23-07-98) USB 28290 callup (DR)
14487 //15682//16084 LP (E3) 1400 (24-07-98) USB 47658 callup (DR)
14487 //15682//16084 LP (E3) 1400 (31-07-98) USB id 47658 (DR)
14487 //15682//16084 LP (E3) 1401 (21-08-98) USB id 88509 (DR)
14487 //15682//16084 LP (E3) 1401 (30-07-98) USB id 28290 (DR)
14487 //15682//16084 LP (E3) 1404 (05-08-98) USB id 84176 (DR)
14487 //15682//16084 LP (E3) 1405 (20-08-98) USB id 00180 (DR)
14487 //15682//16084 LP (E3) 1407 (06-08-98) USB id 41014 (DR)
14487 //16084 LP (E3) 1306 (20-08-98) USB id 30394 (DR)
14487 LP (E3) 1236 (29-07-98) USB In progress (DR)
14487 LP (E3) 1302 (29-07-98) USB id 71416 (DR)
14487 LP (E3) 1400 (29-07-98) USB id 26079 (DR)
14487 LP 1200 Saturday 8/15/98 extremely weak only tune heard. JM4
14487 //15682 USB 1300 Sunday 8/16/98 LP/E3 Extremely weak. JM4
14487 //15682//16084 USB 1200 Monday 8/17/98 LP/E3 extremely weak. JM4
14487 //15682//16084 USB 1300 Monday 8/17/98 LP/E3rptg "30394" w/tune. JM4
14665 Counting Station 28.07.98 1406z USB 470 1234567890 in progress S6 in Central Europe, after five tone of which every even numbered it looks to be sub modulated starts the msg at 1410z. Any observer can proof the sub modulated tones? (It sounded as a digitally coded squelch opener). (IE)
14728 M12 Frid 7/8/98 1640 963x3 1 3681 142 3681 142 (GD2)
14731 BPA (FAPSI) M42 08/08/98 1500Z carrier on early as usual for 1515Z xmsn but just didled the keys a few times then off at 1503 (BR)
14843 FAPSI RTTY 2230 Monday Aug 10 Loud N0N, then FAPSI RTTY, (M42) ended at 2236. (HS)
14843 JMS (FAPSI) M42 07/31/98 2230Z RTTY 425/75 with 2/358 msgs (BR)
14843 JMS FAPSI RTTY (M42) Jul 24/98 425/75 with 3/447 msgs (BR)
14843 JMS FAPSI RTTY (M42) Jul 27/98 425/75 with 4/520 msgs (BR)
14892 Russian Man 'control' (S25) 0804 (17-08-98) id 615 fin at 0818 (DR)
14931 8BY, 2056, cw, vvv 8BY 097/629/532/476 //12075 and 10248 (JP)
14941 WNY FAPSI RTTY (M42) Jul 24/98 425/75 with 1/125 msg (BR)
15388 V13 1300 Monday 8/17/98 New Star Broadcasting YL/CC 4FGx2. JM4
15388 V13 1300 Sunday 8/16/98 New Star Broadcasting YL/CC 4FGx2. JM4
15478 V5 0100UTC, 12/August. 3/2 FG. //16050. "Fin" at 0135UTC.(JL)
15478 // 16050 counting stn (V5) Jul 17/98 AM (BR) 15478//16050 AM 0100 Friday 7/17/98 Counting Station/V5 YL/SS 3/2FG .(JM4)
15478 V5 0100UTC, 14/August. Strong but noisy signal. 3/2 FG. Repeated "groupo" at 0123UTC. //16050. "Fin" at 0135UTC.(JL)
15478 //16050 AM 0100 Wednesday 7/29/98 The Counting Station/V5 YL/SS

"407" w/1-0 count. At 0110, "Grupo 219" and into 3/2FG. (JM4)

15478 //16050 AM 0100 Wednesday 8/12/98 The Counting Station/V5 YL/SS
3/2FG in progress. JM4

15624 Cherry Ripe (E4) (28-07-98) 0003 USB id 15185 (DR)

15624 Cherry Ripe (E4) (28-07-98) USB id 15185 (DR)

15624 Cherry Ripe (E4) 2202 (05-08-98) USB id 55766 short preamble (DR)

15624 Cherry Ripe (E4) 2202 (05-08-98) USB id 55766 short preamble (DR)

15624 Cherry Ripe (E4) 2202 (17-08-98) USB id 66269 (DR)

15624 Cherry Ripe (E4) 2204 (19-08-98) USB id inaudible (DR)

15624 Cherry Ripe (E4) 2205 (10-08-98) USB id 70365 (DR)

15624 Cherry Ripe (E4) 2206 (04-08-98) USB id 56263? short preamble (DR)

15624 Cherry Ripe (E4) 2206 (04-08-98) USB id 56263? short preamble (DR)

15624 Cherry Ripe (E4) 2212 (16-08-98) USB In progress (DR)

15635 M12 CW 0112 Monday 8/3/98 rptg "564" then rapid 5FGx2 w/long
zeros. Down at :31 w/five long zeros. +60db! (JM4)

16050 V5/SS/YL/3-2FG/30July/0105 UTC, in progress. Heard ten beeps just
after the preamble. Strong signal (RST:55)//on 15478, but a
weaker signal. Ended at 0145UTC, I missed the "end" because of a
sudden increase in noise. (JL)

16084 LP (E3) 1405UTC, 05 August. Very weak signal and barely readable.
Jammer present intermittently before and during transmission.
Header: 84176. (JL)

16084 LP (E3) 1500 Wednesday 7/15/98 YL/EE rptg "75506" w/tune. 5FGx2
at :10 (JM4)

16218 HZW FAPSI RTTY (M42) Jul 28/98 425/75 with 1/3 msg (BR)

17499 Cherry Ripe (E4) (27-07-98) 2300 USB id 83980 (DR)

17499 Cherry Ripe (E4) (27-07-98) USB id 83980 (DR)

17499 Cherry Ripe (E4) 0003 (11-08-98) USB Weak id inaudible (DR)

17499 Cherry Ripe (E4) 2300 (16-08-98) USB id 440?? (DR)

17499 Cherry Ripe (E4) 2300 (17-08-98) USB id 73553? (DR)

17499 CHERRY RIPE (E4) 2300Z (14.07.98) USB id 15185 simulcast 20474
//23461 (SD)

18000 Phonetic alphabet-pre NATO (E15) 1103 (18-08-98)id BEC QRU msg
(DR)

19088 WNY FAPSI RTTY (M42) Jul 24/98 425/75 with 1/125 msg (BR)

19884 //22108 Cherry Ripe (E4) 1300 (11-08-98) USB id 16511 short
preamble (DR)

19884 //22108 Cherry Ripe (E4) 1300 (17-08-98) USB id 31310 (DR)

19884 //22108 Cherry Ripe (E4) 1300 (17-08-98) USB id 31310 (DR)

19884 //22108 Cherry Ripe (E4) 1301 (18-08-98) USB id 36992 (DR)

19884 //22108 Cherry Ripe (E4) 1301 (20-08-98) USB id 13553 (DR)

19884 Cherry Ripe (E4) 1304 (10-08-98) USB id 72451 (DR)

19884 Cherry Ripe USB 0100 Friday 7/17/98 5FGx2 in progress.(JM4)

19884 Cherry Ripe USB 0100 Monday 8/10/98 YL/EE rptg "55____"w/tune -
weak. JM4

19884 Cherry Ripe USB 0100 Monday 8/3/98 weak - YL could barely be
heard. (JM4)

19884 Cherry Ripe USB 0100 Tuesday 7/28/98 extremely weak - only tune

audible. (JM4)

19884 Cherry Ripe USB 0100 Tuesday Aug 11 //21866 (HS)

19884 //22108 Cherry Ripe USB 0000 Thursday 7/16/98 weak - only tune audible.(JM4)

20474 //23461 Cherry Ripe (E4) 1002 (20-08-98) USB id 31310 (DR)

20474 //23461 Cherry Ripe (E4) 1019 (17-08-98) USB In progress (DR)

20474 //23461 Cherry Ripe (E4) 1019 (17-08-98) USB In progress (DR)

20474 //23461 Cherry Ripe (E4) 1100 (17-08-98) USB id 47984 short preamble (DR)

20474 //23461 Cherry Ripe (E4) 1100 (17-08-98) USB id 47984 short preamble (DR)

20474 //23461 Cherry Ripe (E4) 1104 (10-08-98) USB id 80715 short preamble (DR)

20474 //23461 Cherry Ripe (E4) 1104 (18-08-98) USB id 41198 (DR)

20474 //23461 Cherry Ripe (E4) 1105 (11-08-98) USB id 36434 short preamble (DR)

20474 //23461 Cherry Ripe (E4) 1107 (05-08-98) USB id 16511? short preamble (DR)

20474 //23461 Cherry Ripe (E4) 1107 (05-08-98) USB id 16511? short preamble (DR)

20474 //23461 Cherry Ripe (E4) 1107 (06-08-98) USB id 16511? (DR)

20474 //23461 Cherry Ripe (E4) 1107 (06-08-98) USB id 16511? (DR)

20474 //23461 Cherry Ripe (E4) 1126 (04-08-98) USB In progress (DR)

20474 //23461 Cherry Ripe (E4) 1126 (04-08-98) USB In progress (DR)

20474 //23461 Cherry Ripe (E4) 1200 (11-08-98) USB id 72451 short preamble (DR)

20474 //23461 Cherry Ripe (E4) 1201 (18-08-98) USB id 31310 (DR)

20474 //23461 Cherry Ripe (E4) 1202 (04-08-98) USB id 72451 (DR)

20474 //23461 Cherry Ripe (E4) 1202 (04-08-98) USB id 72451 (DR)

20474 //23461 Cherry Ripe (E4) 1202 (05-08-98) USB id 16511 short preamble (DR)

20474 //23461 Cherry Ripe (E4) 1202 (05-08-98) USB id 16511 short preamble (DR)

20474 //23461 Cherry Ripe (E4) 1202 (20-08-98) USB id 44064 (DR)

20474 //23461 Cherry Ripe (E4) 1204 (10-08-98) USB id 36434 (DR)

20474 //23461 Cherry Ripe (E4) 1219 (05-08-98) USB In progress (DR)

20474 //23461 Cherry Ripe (E4) 1219 (05-08-98) USB In progress (DR)

20474 //23461 Cherry Ripe (E4) 1219 (06-08-98) USB In progress (DR)

20474 //23461 Cherry Ripe (E4) 1219 (06-08-98) USB In progress (DR)

20474 //23461 Cherry Ripe (E4) 1222 (17-08-98) USB In progress (DR)

20474 //23461 Cherry Ripe (E4) 1222 (17-08-98) USB In progress (DR)

20474 Cherry Ripe (E4) 1100 (20-08-98) USB id 36992 (DR)

20474 Cherry Ripe (E4) 1102 (21-08-98) USB id inaudible (DR)

20474 Cherry Ripe (E4) 1111 (07-08-98) USB In progress (DR)

20474 Cherry Ripe (E4) 1111 (07-08-98) USB In progress (DR)

20474 Cherry Ripe (E4) 1200 (21-08-98) USB id inaudible (DR)

20474 Cherry Ripe (E4) 1221 (07-08-98) USB In progress (DR)

20474 Cherry Ripe (E4) 1221 (07-08-98) USB In progress (DR)

22108 Cherry Ripe USB 0000 Monday 8/10/98 YL/EE rptg "56263" w/tune and
 into 5FGx2. JM4
 22108 Cherry Ripe USB 0000 Mon 8/3/98 weak -YL could barely be heard
 (JM4)
 22108 Cherry Ripe USB 0000 Tuesday 8/11/98 YL/EE 5FGx2 in progress. JM4
 22108 Cherry Ripe USB 0000 Tuesday 8/4/98 YL/EE rptg "55766" and into
 5FGx2 at :08! JM4
 22108 Cherry Ripe USB 0000 Tuesday Aug 11 (HS)
 22108 Cherry Ripe USB 0000 Wedn 8/12/98 (new format) YL/EE rptg "01399"
 w/tune and into 5FGx2. JM4
 23461 Cherry Ripe (E4) 1002 (05-08-98) USB id 72451 short preamble (DR)
 23461 Cherry Ripe (E4) 1002 (05-08-98) USB id 72451 short preamble (DR)
 23461 Cherry Ripe (E4) 1002 (06-08-98) USB id 72451 (DR)
 23461 Cherry Ripe (E4) 1002 (06-08-98) USB id 72451 (DR)
 23461 Cherry Ripe USB 2300 Wednesday 7/15/98 YL/EE 5FGx2 in
 progress.(JM4)

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- * GD2: Guy Denman, England
- * HFD: Hans-Friedrich Dumrese, Germany
- * HS: Hugh Stegman (from the wun list)
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- * SD: Simon Deneen, Goldcoast, Australia
- * TM: Tom Mazanec
- * VM: Valeriano Martin, 40:39N 4:41W
- * WCA: W. Charles Alexander, Columbus, Ohio, USA

Special thanks to Guy and Darren. Keep those logs coming, folks !

Remember: logs for September to Ary and the list only.

Tschuess

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Check out the WUN web site at: <http://www.gem.net/~berri/wun>

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